May 30, 2002

Mr. Bryan Sheets
Eli Lilly and Company
P.O. Box 99
Clinton, IN 47842-0099

Re: A 165-14531-00009
Amendments to: CP 165-1951, CP 165-3801, CP 165-9135, Registration Issued on 10/11/90, Registration 165-2031, and Registration 165-2531

Dear Mr. Sheets:

Eli Lilly and Company submitted an application on June 25, 2001, to amend all existing permits associated with the solvent recovery tank modules, specifically to:

(1) remove all requirements in the existing permits that incorrectly require the source to utilize add-on controls to reduce the amount of VOC emissions generated by the solvent recovery module tanks, and

(2) establish existing regenerative thermal oxidizers as the add-on controls for the solvent recovery module tank VOC and HAP emissions.

Removing the errors made in the rule applicability determinations of the existing permits provides Eli Lilly and Company with the flexibility to use regenerative thermal oxidizers as the add-on control devices to comply with emission limits and standards applicable to those operations.

Once the regenerative thermal oxidizers are established as the add-on controls under this proposed amendment, Eli Lilly and Company will, through a separate request, use the regenerative thermal oxidizers to achieve compliance with the requirements of a new rule, 40 CFR 63, Subpart GGG.

Typically both requirements would be addressed in the existing single source operating permit via source and permit modifications. However, Eli Lilly's single source operating permit, Part 70 permit 165-6462-00009, is still pending.

The issues associated with the requirements of 40 CFR 63, Subpart GGG shall be addressed by:

(1) achieving compliance with all applicable requirements of newly promulgated National Emission Standard for Hazardous Air Pollutants (NESHAP) 40 CFR 63, Subpart GGG as the requirements become applicable, and

(2) proposing additional language to be incorporated into the source Part 70 operating permit which is currently pending.

Since the NESHAP is a federal requirement that is not required to be in any permit for it to applicable, the requirements can be incorporated into the pending Part 70 Permit as a separate approval, even if the Part 70 itself may take some time to be issued, because Eli Lilly and Company

must comply with the requirements of 40 CFR 63, Subpart GGG as they become applicable, whether the permit is issued or not.

The applicable existing permits under this application are:

(1)	Construction Permit	165-1951
(2)	Construction Permit	165-3801
(3)	Construction Permit	165-9135
(4)	Registration	Issued on 10/11/90
(5)	Registration	165-2031
(6)	Registration	165-2531

These permits shall be amended as follows:

(1) Construction Permit 165-1951-00009:

This permit was issued for a capacity expansion of their bulk pharmaceutical operations. Under this permit, the fugitive and point source VOC emissions from all of the equipment listed in the permit were limited to less than 39.6 tons per year.

This permit has 5 operating conditions that either apply directly or indirectly to the tanks of the solvent recovery tank modules (Operation Conditions 3, 4, 5, 7, and 8).

The following is a description of the review of these conditions, the errors and inaccurate information found, and the changes that will be made.

(a) Operation Condition 3:

Operation Condition 3 requires that all the equipment under this modification be operated and maintained in accordance with the manufacturer's specifications.

No changes to this condition are necessary.

(b) Operation Condition 4:

Operation Condition 4 requires the reactors, distillation columns, dryers, extruders, filters, crystallizers, centrifuges, and storage tanks to be controlled by vent condensers or their equivalent, pursuant to 326 IAC 8-5-3.

326 IAC 8-5-3 applies to the reactors, distillation units, dryers, storage units, transfer units, extraction equipment, filters, crystallizers, and centrifuges proposed in this modification because the units are listed applicable facilities, handle VOCs, and the units have potential to emit greater than the applicable level of 15 pounds per day*.

* Eli Lilly and Company, via a phone conversation, stated that since there was no means of determining the potential to emit of all the equipment listed in this permit, that the potential to emit can be assumed to be greater than the applicable level of 15 pounds per day.

The following lists the specific requirements under 326 IAC 8-5-3 and determines whether or not the rules apply to the units of this modification.

(1) 326 IAC 8-5-3(b)(1):

The control requirements of 326 IAC 8-5-3(b)(1) apply to all reactors, distillation operations, crystallizers, centrifuges, and vacuum dryers listed in this modification.

(2) 326 IAC 8-5-3(b)(2):

The requirements of 326 IAC 8-5-3(b)(2) apply to all air dryers and production equipment exhaust sources existing as of July 1, 1990, in Clark, Elkhart, Floyd, Lake, Marion, Porter, and St. Joseph counties, and at new sources located in any county construction of which commences after July 1, 1990.

The requirements of 326 IAC 8-5-3(b)(2) do not apply to the equipment listed in this modification because the source is not located in Clark, Elkhart, Floyd, Lake, Marion, Porter, or St. Joseph counties and the source was existing on July 1, 1990.

(3) 326 IAC 8-5-3(b)(3):

The requirements of 326 IAC 8-5-3(b)(3) apply to all reactors, distillation units, dryers, storage units, transfer units, extraction equipment, filters, crystallizers, and centrifuges listed in this modification.

(4) 326 IAC 8-5-3(b)(4):

The requirements of 326 IAC 8-5-3(b)(4) apply to all reactors, distillation units, dryers, storage units, transfer units, extraction equipment, filters, crystallizers, and centrifuges listed in this modification.

(5) 326 IAC 8-5-3(b)(5):

The requirements of 326 IAC 8-5-3(b)(5) apply to all reactors, distillation units, dryers, storage units, transfer units, extraction equipment, filters, crystallizers, and centrifuges listed in this modification.

(6) The requirements of 326 IAC 8-5-3(b)(6) apply to all reactors, distillation units, dryers, storage units, transfer units, extraction equipment, filters, crystallizers, and centrifuges listed in this modification.

Based on this analysis, Operation Condition 4 is hereby amended as follows:

4. ~~That these facilities shall comply with 326 IAC 8-5-3(a). This rule requires:~~

~~(a) surface condensers or equivalent on reactors, distillation columns, dryers, extruders, filters, crystallizers, centrifuges, and storage tanks, paragraph (1),~~

~~(b) vapor balance or equivalent with a minimum of 90% control on all railroad deliveries to storage tanks, paragraph (3),~~

~~(c) enclosures of all centrifuges and rotary vacuum filters with exposed liquid surfaces with vapor pressures greater than 0.5 psi, paragraph (4),~~

~~(d) covers on all process tanks, paragraph (5),~~

~~(e) repairs of all leaks the first time the unit is off line long enough to make the repair, paragraph (6), and~~

Pursuant to 326 IAC 8-5-3, the owner or operator shall:

(a) control the volatile organic compound (VOC) emissions from all reactors, distillation operations, crystallizers, centrifuges, and vacuum dryers utilizing surface condensers or their equivalent.

(1) If surface condensers are used, the condenser outlet gas temperature shall not exceed:

(A) minus twenty-five degrees Celsius (-25°C) when condensing VOC of vapor pressure greater than forty (40) kiloPascals (five and eight-tenths (5.8) pounds per square inch),
(B) minus fifteen degrees Celsius (-15°C) when condensing VOC of vapor pressure greater than twenty (20) kiloPascals (two and nine-tenths (2.9) pounds per square inch),
(C) zero degrees Celsius (0°C) when condensing VOC of vapor pressure greater than ten (10) kiloPascals (one and five-tenths (1.5) pounds per square inch),
(D) ten degrees Celsius (10°C) when condensing VOC of vapor pressure greater than seven (7) kiloPascals (one (1) pound per square inch), or
(E) twenty-five degrees Celsius (25°C) when condensing VOC of vapor pressure greater than three and five-tenths (3.5) kiloPascals (five-tenths (0.5) pound per square inch).

The vapor pressures listed in Part (a)(1) of this condition shall be measured in at twenty degrees Celsius (20°C).

(2) If equivalent controls are used, the VOC emissions must be reduced by at least as much as they would be by using a surface condenser which meets the requirements of Part (a)(1) of this Condition.

(b) for the reactors, distillation operations, dryers, storage tanks, transfer equipment, extraction equipment, filters, crystallizers, and centrifuges:

(1) provide a vapor balance system or equivalent control that is at least ninety percent (90%) effective in reducing emissions from truck or railcar deliveries to storage tanks with capacities greater than seven thousand five hundred (7,500) liters (two thousand (2,000) gallons) that store VOC with vapor pressures greater than twenty-eight (28) kiloPascals (four and one-tenth (4.1) pounds per square inch) at twenty degrees Celsius (20°C), and

(2) install pressure/vacuum conservation vents set at plus or minus two-tenths (+-0.2) kiloPascals on all storage tanks that store VOC with vapor pressures greater than ten (10) kiloPascals (one and five-tenths (1.5) pounds per square

inch at twenty degrees Celsius (20°C)), unless a more effective control system is used.

(3) enclose all centrifuges, rotary vacuum filters, and other filters having an exposed liquid surface, where the liquid contains VOC and exerts a total VOC vapor pressure of three and five-tenths (3.5) kiloPascals (five-tenths (0.5) pounds per square inch) or more at twenty degrees Celsius (20°C).

(4) install covers on all inprocess tanks containing a volatile organic compound at any time. These covers must remain closed, unless production, sampling, maintenance, or inspection procedures require operator access.

(5) repair all leaks from which a liquid, containing VOC, can be observed running or dripping. The repair shall be completed the first time the equipment is off line for a period of time long enough to complete the repair.

(c) Operation Condition 5:

Operation Condition 5 of this modification lists the storage tank requirements of 40 CFR 60, Subpart Kb.

40 CFR 60, Subpart Kb, applies to each volatile organic liquid storage vessel with a capacity greater than or equal to 40 cubic meters.

The following is a review of 40 CFR 60, Subpart Kb and it's applicability.

Tanks TK-205, TK-206, TK-220, TK-224, and TK-236 do not store volatile organic liquids. Thus, the requirements of Subpart Kb do not apply to these tanks.

Since the capacity of tank TK-99 is less than the applicable capacity 40 cubic meters, Tank TK-99 is exempt from the requirements of 40 CFR 60, Subpart Kb.

Tanks TK-202, TK-204, TK-207, TK-209, TK-211, TK-213, TK-215, TK-217, TK-218, TK-221, TK-222, TK-223, TK-234, TK-238, TK-239, TK-240, TK-241, TK-242, TK-244, TK-246, TK-250, TK-252, TK-254, and TK-255, each, store volatile organic liquids, were constructed, reconstructed, or modified after July 23, 1984, have capacities greater than 40 cubic meters, and have true vapor pressures less than or equal to 15 kiloPascals. Therefore, pursuant to 40 CFR 60.110b(b) and (c), these tanks are subject to the requirements of 40 CFR 60.116b(a) and (b).

Tank	VOL ?	Capacity (m3)	TVP (kPa)	Const. Date	Rule	Requirements
TK-202	Y	144	<=15	01-01-91	Kb	Records of Capacity and Dimension
TK-204	Y	144	<=15	01-01-91	Kb	Records of Capacity and Dimension
TK-205	N	-	-	-	-	None
TK-206	N	-	-	-	-	None
TK-207	Y	74	<=15	12-01-91	Kb	Records of Capacity and Dimension
TK-209	Y	74	<=15	12-01-91	Kb	Records of Capacity and Dimension
TK-211	Y	74	<=15	12-01-91	Kb	Records of Capacity and Dimension
TK-213	Y	74	<=15	12-01-91	Kb	Records of Capacity and Dimension

TK-215	Y	74	<=15	12-01-91	Kb	Records of Capacity and Dimension
TK-217	Y	74	<=15	12-01-90	Kb	Records of Capacity and Dimension
TK-218	Y	144	<=15	12-01-90	Kb	Records of Capacity and Dimension
TK-220	N	-	-	-	-	None
TK-221	Y	74	<=15	12-01-91	Kb	Records of Capacity and Dimension
TK222	Y	144	<=15	12-01-90	Kb	Records of Capacity and Dimension
TK-223	Y	74	<=15	12-01-91	Kb	Records of Capacity and Dimension
TK-224	N	-	-	-	-	None
TK-234	Y	146	<=15	01-01-91	Kb	Records of Capacity and Dimension
TK-236	N	-	-	-	-	None
TK-238	Y	146	<=15	01-01-91	Kb	Records of Capacity and Dimension
TK-239	Y	74	<=15	01-01-91	Kb	Records of Capacity and Dimension
TK-240	Y	146	<=15	01-01-91	Kb	Records of Capacity and Dimension
TK-241	Y	74	<=15	01-01-91	Kb	Records of Capacity and Dimension
TK-242	Y	146	<=15	01-01-91	Kb	Records of Capacity and Dimension
TK-244	Y	146	<=15	01-01-91	Kb	Records of Capacity and Dimension
TK-246	Y	146	<=15	01-01-91	Kb	Records of Capacity and Dimension
TK-250	Y	146	<=15	04-01-91	Kb	Records of Capacity and Dimension
TK-252	Y	146	<=15	04-01-91	Kb	Records of Capacity and Dimension
TK-254	Y	146	<=15	04-01-91	Kb	Records of Capacity and Dimension
TK-255	Y	74	<=15	04-01-91	Kb	Records of Capacity and Dimension
TK-99	Y	38	<=15	02-01-93	Kb	Exempt

Based on the above determination, Operation Condition 5 is hereby amended as follows:

5. ~~That the storage tanks shall comply with the New Performance Standard, 326 IAC 12, (40 CFR Part 60.110b-60.117b, Subpart Kb). This rule requires:~~

   ~~(a) that Tank Nos. TK-202, TK-204, TK-218, TK-222, TK-234, TK-238, TK-240, TK-244, TK250, and TK-254 shall determine the maximum vapor pressure of the waste mixes stored, paragraph 116b(f), and~~

   ~~(b) that dimensions of all tanks except Tank No. TK-1 shall be kept in a readily accessible place, paragraph 116b(b).~~

   The owner or operator shall, for Tanks TK-202, TK-204, TK-207, TK-209, TK-211, TK-213, TK-215, TK-217, TK-218, TK-221, TK-222, TK-223, TK-234, TK-238, TK-239, TK-240, TK-241, TK-242, TK-244, TK-246, TK-250, TK-252, TK-254, and TK-255, keep readily

accessible records showing for each storage vessel:

(a) the respective dimensions, and
(b) an analysis showing the capacity of each storage vessel.

Said records shall be kept for the life of the source.

(d) Operation Condition 7:

Operation Condition 7 establishes a VOC limit of 39.6 tons/yr to reduce the VOC emissions of the modification to less than the PSD applicable level of 40 tons per year.

Operation Condition 7 is hereby amended as follows to clarify the requirements.

7. ~~That:~~ **The owner or operator shall limit** ~~(a)~~ the number of batches produced ~~and the solvent emission rate of each including the the fugitive emissions from the flanges, valves, pumps, etc., and (b) the amount and type of solvent stored in each of the tanks shall be~~ such that **the** VOC emissions from **all equipment included in this permit** ~~the expansion of the pharmaceutical manufacturing facilities shall~~ **do** not exceed 39.6 tons per twelve consecutive month period.

   The cumulative emissions divided by the cumulative months of operation during any month of the first year of operation shall not exceed 3.3 tons per month. This limitation will make these facilities not subject to Prevention of Significant Deterioration (PSD) 326 IAC 2-2.

(e) New Operation Condition 8:

Eli Lilly and Company has requested that regenerative thermal oxidizers replace the vent condensers as the add-on controls for the solvent recovery module tanks.

It has been determined that the requirements of the newly promulgated NESHAP (40 CFR 63, Subpart GGG) need not be applied under this amendment.

However, since the thermal oxidizers will provide a means for Eli Lilly and Company to achieve compliance with an “existing” synthetic minor limit required in this permit, new operation condition 8 shall be established requiring the thermal oxidizers be used to control the applicable tank emissions and be operated at all times the applicable tanks have liquids that contain VOCs.

No stack testing of the thermal oxidizers shall be required because the stack testing guidance, as described below, states that testing is not required.

Pursuant to the February 15, 2002 stack testing guidance, no stack testing shall be required of the thermal oxidizers because the allowable VOC emissions, without a synthetic limit, from “all” of the equipment of the proposed modification (9.17 lb/hr) are less than the stack guidance level of 10 lb/hr, the source is not claiming an overall control efficiency greater than 85%*, and the VOC unrestricted potential to emit (UPTE) is not greater than 40% of the total VOC PTE**.

* Eli Lilly does not have to claim 85% control because 85% overall control of the solvent recovery module tanks is not required to achieve compliance with the annual VOC emission

limit of 39.6 tons VOC/yr and as previously stated, the 40 CFR 63, Subpart GGG overall control efficiency of 95% need not be achieved under this permit amendment.

** The percent VOC unrestricted potential to emit (UPTE) of the total source VOC UPTE is estimated to be 0.91% which is less than the applicable level of 40%.

[UPTE of "all" tank modules (10.00 tons/yr) / Total Source UPTE (1100 tons/yr)] * 100 = 0.91%

Since no stack testing is required, no thermal oxidizer operating parameters (capture efficiency or operating temperature) shall be required.

Based on the above determination, new Operation Condition 8 is hereby added as follows:

8. The owner or operator shall control the volatile organic compound (VOC) emissions from Tanks TK-202, TK-204, TK-207, TK-209, TK-211, TK-213, TK-215, TK-217, TK-218, TK-221, TK-222, TK-223, TK-234, TK-238, TK-239, TK-240, TK-241, TK-242, TK-244, TK-246, TK-250, TK-252, TK-254, and TK-255, utilizing existing regenerative thermal oxidizers, with said thermal oxidizers being operated at all times liquids containing VOCs are stored in the tanks.

(f) Existing Operation Condition 8:

Existing Operation Condition 8 shall be renumbered as Operation Condition 9.

Existing Operation Condition 8 (now Operation Condition 9) specifies the record keeping and reporting requirements associated with the leak repair requirements of Operation Condition 6, and the VOC emission limit of Condition 7.

This condition shall be restructured and the requirements associated with Operation Conditions 6 and 7 separated to provide more clarity.

Therefore, Operation Condition 9 is hereby amended as follows:

9. Th~~e~~**at owner or operator shall keep and maintain** a log of information necessary to document compliance with **Operation** Condition No~~s~~. 6 ~~and 7 shall be maintained~~. These records shall include**:**

(~~c~~**a**) the number of flanges, valves, and pumps**, etc.** checked, **and**
(b) for all leaks detected,

(1) the parts that were leaking,
(2) the date the leak was detected,
(3) the leak definition and the percent leak~~ing~~**age** ~~for each category~~,
(4) ~~(d)~~ the leak rate,
(5) ~~(e)~~ the type of repair made, and
(6) ~~(f)~~ the date of the repair**,**

with said ~~These~~ records ~~shall~~ be**ing** kept for at least the past 24 month period and made available upon request of the Office of Air ~~Management~~ **Quality**.

Since the requirements of existing Operation Condition 8 (now Operation Condition 9) are separated, a new operation condition (New Operation Condition 10) is required.

New Operation Condition 10 is hereby added as follows:

10. The owner or operator shall keep and maintain a log of information necessary to document compliance with Operation Condition No 7. These records shall include:

(a) **for the process equipment,** the ~~solvent~~ **VOC** emission**s generated during each batch run,** ~~rate of each including the fugitive emissions from the flanges, valves, pumps, etc.~~,

(b) **for each storage tank:**

(1) the amount of liquid stored,
(2) the type of ~~solvent~~ **liquid** stored**, and**
(3) the estimated VOC emissions ~~in each of the tanks~~,

(c) for the flanges, valves, pumps, etc., the estimated VOC emissions, and

(d) for all of the equipment listed in (a), (b), and (c), the total monthly VOC emissions,

with said~~These~~ records ~~shall~~ be**ing** kept for at least the past 24 month period and made available upon request of the Office of Air **Quality**.

To perform the ~~E~~**e**mission calculations**, the owner or operator shall use the following as methods as applicable** ~~shall be based on~~**:**

(~~1~~**a**) ”Control Technique Guidelines for Synthetic Pharmaceutical Manufacturing” - EPA Document 450/2-78-029, December 1978,
(~~2~~**b**) EPA Compilation of Air Pollutant Emission Factors, AP-42, Chapter 4.3 for Storage of Organic Solvents, and
(~~3~~**c**) the EPA rule making proposed guideline emission factors for fugitive emissions from pumps valves and flanges sited in Lilly’s Leak Detection and repair program letter of May 23, 1990.

In addition, the owner or operator shall submit a ~~A~~quarterly summary ~~shall be submitted~~ to:

~~Enforcement Section~~
~~Office of Air Management~~
~~Department of Environmental Management~~
~~P.O. Box 6015~~
~~Indianapolis, Indiana 46206~~

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
within 30 days after the end of the quarter being reported in the format attached.

(g) Permit Unit Description:

The unit description of the permit shall be amended to specify the regenerative thermal oxidation as the add-on controls.

an expansion to the pharmaceutical manufacturing facilities. This expansion will include a series of batch type operations such as reactions, distillations, crystallizations, centrifugations, etc. Also included are solvent recovery and distribution systems. Volatile organic compound (VOC) emissions will be controlled with vent condensers and a common regenerative thermal oxidizer. Thirty-two (32) solvent storage tanks with VOC emissions controlled by ~~vent condensers,~~ **existing** regenerative thermal oxidizer**s** ~~or scrubber will~~ also be added. Individual facilities are listed on Page 2. .....

C64	Storage Tanks Nos. TK-202, TK-204 to TK-207, TK-211, TK-213, TK-215, TK-217, TK-218, TK-220 to TK-224, TK-234, TK-236, TK-238 to TK-242, TK-244, TK-246, TK-250, TK-252, TK-254, TK-255**,** and TK-~~JKL~~**99**	~~Vent Condensers~~ **Regenerative Thermal Oxidizer**
C96	Storage Tank No. TK-1	Scrubber
C63	TK-207 and TK-209	Regenerative Thermal Oxidizer

2. Construction Permit 165-3801:

This permit was for construction and operation of tank modules F and G of the solvent recovery operations. The permit requires that VOC emissions from the tanks be controlled by cryogenic vent condenser with a control efficiency of 95% or more. At the time of permitting, it was anticipated that the maximum true vapor of the liquids being stored in many of the tanks would trigger the control requirements of 40 CFR 60, Subpart Kb. However, the tanks listed in this permit have never had true vapor pressures greater than the applicable levels that require controls. Thus, the Subpart Kb control requirements should be removed. Even though they are not required pursuant to 40 CFR 60, Subpart Kb, the vent condensers are required to prevent the applicability of PSD.

This permit has 9 operating conditions that either apply the tanks (Operation Conditions 3, 4, 5, 6, 7, 8, 9, 10, and 11).

The following is a description of the review of these conditions, the errors and inaccurate information found, and the changes that will be made.

(a) Operation Condition 3:

Operation Condition 3 requires that all the equipment under this modification be operated and maintained in accordance with the manufacturer's specifications.

No changes to this condition are necessary.

(b) Operation Condition 4:

Operation Condition 4 establishes the requirements for New Source Performance Standard (NSPS), 40 CFR 60, Subpart Kb.

40 CFR 60, Subpart Kb, applies to each volatile organic liquid storage vessel with a capacity greater than or equal to 40 cubic meters.

The following is a review of 40 CFR 60, Subpart Kb and it's applicability.

Tanks 201, 203, 208, 210, 212, 214, 225, 226, 227, and 228 do not store volatile organic liquids. Thus, the requirements of Subpart Kb do not apply to these tanks.

Tanks 209, 216, 219, 229, 230, 231, 232, 233, 235, 237, 243, 245, 247, and 248, each store volatile organic liquids, were constructed, reconstructed, or modified after July 23, 1984, have capacities greater than 40 cubic meters, and have true vapor pressures less than or equal to 15 kiloPascals. Therefore, pursuant to 40 CFR 60.110b(b) and (c), these tanks are subject to the requirements of 40 CFR 60.116b(a) and (b).

Tank	VOL ?	Capacity (m3)	TVP (kPa)	Const. Date	Rule	Requirements
TK-201	N	-	-	-	-	None
TK-203	N	-	-	-	-	None
TK-208	N	-	-	-	-	None
TK209	Y	74	<=15	12-01-91	Kb	Records of Capacity And Dimension
TK-210	N	-	-	-	-	None
TK-212	N	-	-	-	-	None
TK-214	N	-	-	-	-	None
TK-216	Y	144	<=15	12-01-90	Kb	Records of Capacity and Dimension
TK-219	Y	74	<=15	12-01-91	Kb	Records of Capacity and Dimension
TK-225	N	-	-	-	-	None
TK-226	N	-	-	-	-	None
TK-227	N	-	-	-	-	None
TK-228	N	-	-	-	-	None
TK-229	Y	74	<=15	01-01-91	Kb	Records of Capacity and Dimension
TK-230	Y	146	<=15	01-01-91	Kb	Records of Capacity and Dimension
TK-231	Y	74	<=15	01-01-91	Kb	Records of Capacity and Dimension
TK-232	Y	146	<=15	01-01-91	Kb	Records of Capacity and Dimension
TK-233	Y	74	<=15	01-01-91	Kb	Records of Capacity and Dimension
TK-235	Y	74	<=15	01-01-91	Kb	Records of Capacity and Dimension
TK-237	Y	74	<=15	01-01-91	Kb	Records of Capacity and Dimension

TK-243	Y	74	<=15	01-01-91	Kb	Records of Capacity and Dimension
TK-245	Y	74	<=15	01-01-91	Kb	Records of Capacity and Dimension
TK-247	Y	74	<=15	01-01-91	Kb	Records of Capacity and Dimension
TK-248	Y	146	<=15	01-01-91	Kb	Records of Capacity and Dimension

Based on the above determination, Operation Condition 4 is hereby amended as follows:

4. ~~That pursuant to 326 IAC 12 and 40 CFR 60.116b(b) the owner or operator shall keep readily accessible records showing the dimension of all the storage tanks and an analysis showing the capacity of all the storage tanks for the life of the source.~~

   The owner or operator shall, for Tanks TK-209, TK-216, TK-219, TK-229, TK-230, TK-231, TK-232, TK-233, TK-235, TK-237, TK-243, TK-245, TK-247, and TK-248, keep readily accessible records showing for each storage vessel:

   (a) the respective dimensions, and
   (b) an analysis showing the capacity of each storage vessel.

   Said records shall be kept for the life of the source.

(c) Existing Operation Condition 5:

Operation Condition 5 specifies the vent condenser operating requirements.

During the initial review, Eli Lilly and Company provided tank solvent information based on the assumption that there would be tanks that could, at any time, have some amount of acetone in them.

Since the true vapor pressure of acetone exceeds the 40 CFR 60, Subpart Kb applicable levels, these tanks were required to have controls.

However, since issuance of the permit, acetone has been declassified as a volatile organic compound (VOC). Therefore, the true vapor pressures of the worst case solvents in these tanks no longer exceed the applicable levels and the requirement to have emissions controls pursuant to Subpart Kb no longer applies.

Thus, the requirements of Operation Condition 5 are hereby removed.

~~That the vent condensers control system shall be set to maintain a minimum coolant flow rate of 10,000 pounds per hour of Syltherm per condenser and a minimum coolant inlet temperature of -40°C.~~

(d) New Operation Condition 5:

326 IAC 8-5-3 applies to the reactors, distillation units, dryers, storage units, transfer units, extraction equipment, filters, crystallizers, and centrifuges proposed in this modification because the units are listed applicable facilities, handle VOCs, and the units have potential to emit greater than the applicable level of 15 pounds per day*.

* Eli Lilly and Company, via a phone conversation, stated that since there was no means of determining the potential to emit of all the equipment listed in this permit, that the potential to emit can be assumed to be greater than the applicable level of 15 pounds per day.

Since 326 IAC 8-5-3 applies to the applicable units under this modification and the are no existing conditions currently in the permit, a new condition (Operation Condition 5) shall be added based on the following rule analysis:

(1) 326 IAC 8-5-3(b)(1):

The control requirements of 326 IAC 8-5-3(b)(1) apply to all reactors, distillation operations, crystallizers, centrifuges, and vacuum dryers listed in this modification. Since the units of this modification are solvent recovery module tanks, the requirements of 326 IAC 8-5-3(b)(1) do not apply in this case.

(2) 326 IAC 8-5-3(b)(2):

The requirements of 326 IAC 8-5-3(b)(2) apply to all air dryers and production equipment exhaust sources existing as of July 1, 1990, in Clark, Elkhart, Floyd, Lake, Marion, Porter, and St. Joseph counties, and at new sources located in any county construction of which commences after July 1, 1990.

The requirements of 326 IAC 8-5-3(b)(2) do not apply to the equipment listed in this modification because the source is not located in Clark, Elkhart, Floyd, Lake, Marion, Porter, or St. Joseph counties and the source was existing on July 1, 1990.

(3) 326 IAC 8-5-3(b)(3):

The requirements of 326 IAC 8-5-3(b)(3) apply to Tanks TK-209, TK-216, TK-219, TK-229, TK-230, TK-231, TK-232, TK-233, TK-235, TK-237, TK-243, TK-245, TK-247, and TK-248 because these tanks store liquids that contain VOCs.

(4) 326 IAC 8-5-3(b)(4):

The requirements of 326 IAC 8-5-3(b)(4) do not apply to the storage tanks of this modification because 326 IAC 8-5-3(b)(4) applies specifically to centrifuges, rotary vacuum filters, and other filters, not storage tanks.

(5) 326 IAC 8-5-3(b)(5):

The requirements of 326 IAC 8-5-3(b)(5) do not apply to the storage tanks of this modification because the tanks are not “inprocess” tanks.

(6) 326 IAC 8-5-3(b)(6):

The requirements of 326 IAC 8-5-3(b)(6) apply to the storage tanks TK-209, TK-216, TK-219, TK-229, TK-230, TK-231, TK-232, TK-233, TK-235, TK-237, TK-243, TK-245, TK-247, and TK-248 because 326 IAC 8-5-3(b)(6) applies to all reactors, distillation operations, crystallizers, centrifuges, and vacuum dryers, all storage tanks, transfer equipment, extraction equipment, and filters.

Based on the above determination, new operation condition 5 is hereby added:

5. Pursuant to 326 IAC 8-5-3**, the owner or operator shall, for Tanks TK-209, TK-216, TK-219, TK-229, TK-230, TK-231, TK-232, TK-233, TK-235, TK-237, TK-243, TK-245, TK-247, and TK-248:**

(a) provide a vapor balance system or equivalent control that is at least ninety percent (90%) effective in reducing emissions from truck or railcar deliveries to storage tanks with capacities greater than seven thousand five hundred (7,500) liters (two thousand (2,000) gallons) that store VOC with vapor pressures greater than twenty-eight (28) kiloPascals (four and one-tenth (4.1) pounds per square inch) at twenty degrees Celsius (20°C),

(b) install pressure/vacuum conservation vents set at plus or minus two-tenths (+-0.2) kilo Pascals on all storage tanks that store VOC with vapor pressures greater than ten (10) kiloPascals (one and five-tenths (1.5) pounds per square inch at twenty degrees Celsius (20°C)), unless a more effective control system is used, and

(c) repair all leaks from which a liquid, containing VOC, can be observed running or dripping. The repair shall be completed the first time the equipment is off line for a period of time long enough to complete the repair.

(e) Existing Operation Condition 6:

Operation Condition 6 includes 40 CFR 60, Subpart Kb requirements that do not apply to any of the tanks because the true vapor pressures of all tanks are less than or equal to the applicable pressure of 15 kiloPascals.

Thus, the requirements of Operation Condition 6 is hereby removed.

~~6. That pursuant to 326 IAC 12 and 40 CFR 60.115b(c)(1), the owner or operator shall keep the following records pertaining to tank nos. TKS-208, 210, 212, 214, 216, 226, 228, 230, 232, and 248.~~

~~(a) A copy of the operating plan as describe in 40 CFR 60.113b(c).~~

~~(b) A record of the measured values of the gas outlet temperature, coolant (Syltherm) flow rate and coolant inlet temperature to be monitored to ensure that the control device shall be operated to maintain at least 95% VOC control efficiency.~~

(f) Operation Condition 7:

Operation Condition 7 includes 40 CFR 60, Subpart Kb requirements that do not apply to any of the tanks because the true vapor pressures of all tanks are less than or equal to the applicable pressure.

Thus, the requirements of Operation Condition 7 are hereby removed.

~~7. That pursuant to 326 IAC 12 and 40 CFR 60.116b(f)(1), prior to initial filling the owner or operator shall determine the maximum true vapor pressure for the range of anticipated liquid compositions to be stored in the tank nos. TKS-208, 210, 212, 214, 216, 226, 228, 230, 232, and 248, using the methods described in 40 CFR 60.116b(e).~~

(g) Operation Condition 8:

Operation Condition 8 includes 40 CFR 60, Subpart Kb requirements that do not apply to any of the tanks because the true vapor pressures of all tanks are less than or equal to the applicable pressure.

Thus, the requirements of Operation Condition 8 are hereby removed.

~~8. That pursuant to 326 IAC 12 and 40 CFR 60.116b(f)(2), if the vapor pressure of the liquid composition in the tank nos. TKS-208, 210, 212, 214, 216, 226, 228, 230, 232, and 248 are determined to have a maximum vapor pressure between 15 and 27.6 kPa (2. To 4.1 psi), then the owner or operator shall test the vapor pressure once every six months after the initial physical test of vapor pressure. The vapor pressure will be measured by an appropriate method as approved by the Commissioner.~~

(h) Operation Condition 9:

Operation Condition 9 specifies the notification requirements under 40 CFR 60.7.

These conditions are hereby removed because they no longer apply.

~~9. That pursuant to 326 IAC 12 and 40 CFR 60.7, the owner or operator shall furnish the Office of Air Management written notification as follows:~~

~~(a) A notification of the actual date of initial startup of tank Nos. TKS-208, 210, 212, 214. 216, 226, 228, 230, 232, 248 postmarked within 15 days after such date.~~

~~(b) A records of the occurrence and duration of any startup, shutdown, or malfunction i the operation of the tank Nos. TKS-208, 210, 212, 214, 216, 226, 228, 230, 232, and 248; and any malfunction of the vent condensers controlling these tanks.~~

(i) Operation Condition 10:

Existing Operation Condition 10 requires the source to maintain records that document compliance with the requirements of existing conditions 6, 7, 8, and 9, that these records be kept for at least the past 24 month period and made available upon request of the Office of Air Quality, with the required data being submitted to the Compliance Data Section.

Since existing conditions 6, 7, 8, and 9 have been removed, Operation Condition 10 is no longer necessary and is hereby removed.

~~10. That a log of information necessary to document compliance with condition nos. 6, 7, 8, and 9 shall be maintained. These records shall be kept for at least the past 24 month period and made available upon request to the Office of Air Management. The data required in the above conditions shall be submitted to:~~

~~Department of Environmental Management~~
~~Office of Air Management~~
~~Compliance Data Section~~
~~100 North Senate Avenue~~
~~P.O. Box 6015~~
~~Indianapolis, Indiana 46206-6015~~

(j) New Operation Condition 6:

This modification does not have any limits or standards that require the use of add-on controls and it has been determined that the requirements of the newly promulgated NESHAP (40 CFR 63, Subpart GGG) need not be applied under this amendment.

However, even though no add-on controls are required, Eli Lilly and Company has stated that they wish to establish the regenerative thermal oxidizers as the add-on controls under this amendment in anticipation of addressing the requirements of Subpart GGG in their Part 70 permit .

Therefore, the regenerative thermal oxidizers shall be established as add-on controls as follows:

(1) a new condition (Condition 6) shall be added, requiring the solvent recovery module tank VOC emissions be controlled by regenerative thermal oxidizers and that the thermal oxidizers be operated at all times the units of the solvent recovery modules are in operation;
(2) no thermal oxidizer operating parameters shall be required at this time because the add-on controls are not required to meet any applicable requirements at this time; and
(3) no stack testing of the thermal oxidizers shall be required because there are no operating parameters that need to be established at this time.

Based on the above determination, new Operation Condition 6 is hereby added as follows:

6. The owner or operator shall control the volatile organic compound (VOC) emissions from Tanks TK-209, TK-216, TK-219, TK-229, TK-230, TK-231, TK-232, TK-233, TK-235, TK-237, TK-243, TK-245, TK-247, and TK-248, utilizing existing regenerative thermal oxidizers, with said thermal oxidizers being operated at all times liquids containing VOCs are stored in the tanks.

(k) Operation Condition 11:

Operation Condition 11 establishes testing requirements for the vent condensers. Since the vent condensers are no longer required due to change in rule applicability, stack testing is no longer required.

Therefore, Operation Condition 11 is hereby removed.

~~That pursuant to 326 IAC 2-1-3 (Construction and Operating Permit Requirements) compliance test shall be performed for VOC reduction on any one of the condensers within 60 days after~~

~~achieving maximum production rate, but no later than 180 days after initial start-up. These tests shall be performed according to 326 IAC 3-2.1 (Source Sampling Procedues, copy enclosed) using method approved by the Commissioner. The Office of Air management (OAM) shall be notified of actual test date at least two weeks prior to the date, a test protocol shall be submitted to the OAN 35 days in advance of the test, and all test reports must be received by the OAM within 45 days of the completion of the testing, pursuant to that rule.~~

(l) Operation Condition 12:

Operation Condition 12 requires Lilly to have a leak detection and repair procedure as implemented on June 10, 1992.

No changes to the requirements of this condition are necessary, but this condition shall be renumbered from Operation Condition 12 to Operation Condition 7.

~~12~~**7**. That the Lilly Leak Detection and Repair (LDAR) procedure dated June 10, 1992 shall be implemented to reduce fugitive emissions. If it is not feasible to either pressure test a group of fugitive sources or monitor a specific compound, then a written justification will be required for each source or compound exempted from testing. Any necessary adjustments to the procedures shall be submitted to the Office of Air ~~Management~~ **Quality** for approval prior to implementation.

(m) Unit Description:

The unit description shall be amended as follows to reflect the regenerative thermal oxidizers as add-on controls.

.....~~Potential emissions of~~ **The** volatile organic compound~~s~~ **(VOC) emissions** from the tanks will be controlled by ~~cryogenic condensers~~ **regenerative thermal oxidizers** ~~with VOC control efficiency of 95% or more~~.

3. Construction Permit 165-9135:

This permit was issued for adding three new processes to the operations at the Clinton Labs. Several of the tanks in the solvent recovery tank modules were included in this permit. The permit requires that VOC emissions from all of the process equipment be controlled by existing regenerative thermal oxidizers while the storage tanks be controlled by vent condenser in order to limit the VOC emissions to less than 40 tons per year.

This permit has 7 operating conditions that either apply directly or indirectly to the tanks of the solvent recovery modules (Operation Conditions 3, 7, 8, 9, 12, 13, and 14).

The following is a description of the review of these conditions, the errors and inaccurate information found, and the changes that are made.

(a) Operation Condition 3:

Operation Condition 3 requires a preventive maintenance plan. No changes to this condition are required.

(b) Operation Condition 7:

Paragraph (e) of Operation Condition 7 establishes vent condensers as the add-on controls, as per Eli Lilly and Company's request at that time.

Eli Lilly and Company has requested that regenerative thermal oxidizers replace the vent condensers as the add-on controls for the solvent recovery module tanks.

It has been determined that the requirements of the newly promulgated NESHAP (40 CFR 63, Subpart GGG) need not be applied under this amendment.

However, since the thermal oxidizers will provide a means for Eli Lilly and Company to achieve compliance with an "existing" synthetic minor limit required in this permit, Condition 7 must require the thermal oxidizers be used to control the applicable tank emissions and be operated at all times the applicable tanks have liquids that contain VOCs.

No stack testing of the thermal oxidizers shall be required because the stack testing guidance, as described below, states that testing is not required.

Pursuant to the February 15, 2002 stack testing guidance, no stack testing shall be required of the thermal oxidizers because the allowable VOC emissions, without a synthetic limit, from "all" of the equipment of the proposed modification (9.17 lb/hr) are less than the stack guidance level of 10 lb/hr, the source is not claiming an overall control efficiency greater than 85%*, and the VOC unrestricted potential to emit (UPTE) is not greater than 40% of the total VOC PTE**.

* Eli Lilly does not have to claim 85% control because 85% overall control of the solvent recovery module tanks is not required to achieve compliance with the annual VOC emission limit of 39.6 tons VOC/yr and as previously stated, the overall control efficiency of 95% need not be achieved under this permit amendment.

** The percent VOC unrestricted potential to emit (UPTE) of the total source VOC UPTE os estimated to be 0.91% which is less than the applicable level of 40%.

[UPTE of "all" tank modules (10.00 tons/yr) / Total Source UPTE (1100 tons/yr)] * 100 = 0.91%

Since no stack testing is required, no thermal oxidizer operating parameters (capture efficiency or operating temperature) shall be required.

Based on the above determination, Paragraph (e) of Operation Condition 7 is hereby amended as follows:

(e) the VOC emissions from ~~the~~ solvent storage tanks **TK-163, TK-165, TK-169, TK-158, TK-160, TK-162, TK-164, TK-167, TK-255, TK-174, and TK-203,** shall be controlled by ~~the vent condensers~~ **existing regenerative thermal oxidizers ,** ~~that will achieve VOC control efficiencies as described below:~~

~~Tank ID~~	~~VOC control Efficiency~~	~~Coolant supply Temperature (°C)~~
~~C64ETK158~~	~~49.4~~	~~5~~
~~C64ETK160~~	~~49.4~~	~~5~~

~~C64ETK162~~	~~86.6~~	~~5~~
~~C64BTK163~~	~~99.5~~	~~-40~~
~~C64ETK164~~	~~56.9~~	~~5~~
~~C64BTK165~~	~~99.5~~	~~-40~~
~~C64BTK167~~	~~N/A~~	~~-40~~
~~C64BTK169~~	~~N/A~~	~~-40~~
~~C64ETK174~~	~~54.4~~	~~5~~
~~C64BTK203~~	~~93.3~~	~~-40~~

with said thermal oxidizers being operated at all times liquids containing VOCs are stored in the tanks; and

(c) Operation Condition 8:

Operation Condition 8 specifies the applicable 326 IAC 8-5-3 requirements.

326 IAC 8-5-3 applies to the reactors, distillation units, dryers, storage units, transfer units, extraction equipment, filters, crystallizers, and centrifuges proposed in this modification because the units are listed applicable facilities, handle VOCs, and the units have potential to emit greater than the applicable level of 15 pounds per day*.

* Eli Lilly and Company, via a phone conversation, stated that since there was no means of determining the potential to emit of all the equipment listed in this permit, that the potential to emit can be assumed to be greater than the applicable level of 15 pounds per day.

The following lists the specific requirements under 326 IAC 8-5-3 and determines whether or not the rules apply to the units of this modification.

(1) 326 IAC 8-5-3(b)(1):

The control requirements of 326 IAC 8-5-3(b)(1) apply to all reactors, distillation operations, crystallizers, centrifuges, and vacuum dryers listed in this modification.

(2) 326 IAC 8-5-3(b)(2):

The requirements of 326 IAC 8-5-3(b)(2) apply to all air dryers and production equipment exhaust sources existing as of July 1, 1990, in Clark, Elkhart, Floyd, Lake, Marion, Porter, and St. Joseph counties, and at new sources located in any county construction of which commences after July 1, 1990.

The requirements of 326 IAC 8-5-3(b)(2) do not apply to the equipment listed in this modification because the source is not located in Clark, Elkhart, Floyd, Lake, Marion, Porter,

or St. Joseph counties and the source was existing on July 1, 1990.

(3) 326 IAC 8-5-3(b)(3):

The requirements of 326 IAC 8-5-3(b)(3) apply to all reactors, distillation units, dryers, storage units, transfer units, extraction equipment, filters, crystallizers, and centrifuges listed in this modification.

(4) 326 IAC 8-5-3(b)(4):

The requirements of 326 IAC 8-5-3(b)(4) apply to all reactors, distillation units, dryers, storage units, transfer units, extraction equipment, filters, crystallizers, and centrifuges listed in this modification.

(5) 326 IAC 8-5-3(b)(5):

The requirements of 326 IAC 8-5-3(b)(5) apply to all reactors, distillation units, dryers, storage units, transfer units, extraction equipment, filters, crystallizers, and centrifuges listed in this modification.

(6) 326 IAC 8-5-3(b)(6):

The requirements of 326 IAC 8-5-3(b)(6) apply to all reactors, distillation units, dryers, storage units, transfer units, extraction equipment, filters, crystallizers, and centrifuges listed in this modification.

Based on this analysis, Operation Condition 8 is hereby amended as follows:

8. Compliance with 326 IAC 8-5-3

~~That pursuant to 326 IAC 8-5-3 Eli Lilly and Company shall cover the process tank C12TK12, containing a volatile organic compound at any time. These covers must remain closed, unless production, sampling, maintenance, or inspection procedures require operator access.~~

Pursuant to 326 IAC 8-5-3, the owner or operator shall:

(a) control the volatile organic compound (VOC) emissions from all reactors, distillation operations, crystallizers, centrifuges, and vacuum dryers utilizing surface condensers or their equivalent.

(1) If surface condensers are used, the condenser outlet gas temperature shall not exceed:

(A) minus twenty-five degrees Celsius (-25°C) when condensing VOC of vapor pressure greater than forty (40) kiloPascals (five and eight-tenths (5.8) pounds per square inch),

(B) minus fifteen degrees Celsius (-15°C) when condensing VOC of vapor pressure greater than twenty (20) kiloPascals (two and nine-tenths (2.9)

pounds per square inch),

(C) zero degrees Celsius (0°C) when condensing VOC of vapor pressure greater than ten (10) kiloPascals (one and five-tenths (1.5) pounds per square inch),

(D) ten degrees Celsius (10°C) when condensing VOC of vapor pressure greater than seven (7) kiloPascals (one (1) pound per square inch), or

(E) twenty-five degrees Celsius (25°C) when condensing VOC of vapor pressure greater than three and five-tenths (3.5) kiloPascals (five-tenths (0.5) pound per square inch).

The vapor pressures listed in Part (a)(1) of this condition shall be measured in at twenty degrees Celsius (20°C).

(2) If equivalent controls are used, the VOC emissions must be reduced by at least as much as they would be by using a surface condenser which meets the requirements of Part (a)(1) of this Condition.

(b) for the reactors, distillation operations, dryers, storage tanks, transfer equipment, extraction equipment, filters, crystallizers, and centrifuges:

(1) provide a vapor balance system or equivalent control that is at least ninety percent (90%) effective in reducing emissions from truck or railcar deliveries to storage tanks with capacities greater than seven thousand five hundred (7,500) liters (two thousand (2,000) gallons) that store VOC with vapor pressures greater than twenty-eight (28) kiloPascals (four and one-tenth (4.1) pounds per square inch) at twenty degrees Celsius (20°C), and

(2) install pressure/vacuum conservation vents set at plus or minus two-tenths (+-0.2) kiloPascals on all storage tanks that store VOC with vapor pressures greater than ten (10) kiloPascals (one and five-tenths (1.5) pounds per square inch at twenty degrees Celsius (20°C)), unless a more effective control system is used.

(3) enclose all centrifuges, rotary vacuum filters, and other filters having an exposed liquid surface, where the liquid contains VOC and exerts a total VOC vapor pressure of three and five-tenths (3.5) kiloPascals (five-tenths (0.5) pounds per square inch) or more at twenty degrees Celsius (20°C).

(4) install covers on all inprocess tanks containing a volatile organic compound at any time. These covers must remain closed, unless production, sampling, maintenance, or inspection procedures require operator access.

(5) repair all leaks from which a liquid, containing VOC, can be observed running or dripping. The repair shall be completed the first time the equipment is off line for a period of time long enough to complete the repair.

(d) Operation Condition 9:

Operation Condition 9 specifies the operating parameter record keeping requirements.

Operation Condition 9 includes requirements for the regenerative thermal oxidizers. Since the thermal oxidizers that are referenced in Operation Condition 9 are the same regenerative

thermal oxidizers that will control the solvent recovery module tank emissions, no changes to this condition shall be made.

(e) Operation Condition 12:

Operation Condition 12 establishes the requirements for New Source Performance Standard (NSPS), Subpart Kb.

40 CFR 60, Subpart Kb, applies to each volatile organic liquid storage vessel with a capacity greater than or equal to 40 cubic meters.

The following is a review of 40 CFR 60, Subpart Kb, it's applicability to the storage tanks proposed in this modification, and the requirements that apply.

Tanks TK-163, TK-165, TK-169, TK-158, TK-160, TK-162, TK-167, TK-255, TK-174, and TK-203, each store volatile organic liquids, were constructed, reconstructed, or modified after July 23, 1984, have capacities greater than 40 cubic meters, and have true vapor pressures less than or equal to 15 kiloPascals. Therefore, pursuant to 40 CFR 60.110b(b) and (c), these tanks are subject to the requirements of 40 CFR 60.116b(a) and (b).

Tank	VOL ?	Capacity (m3)	TVP (kPa)	Const. Date	Rule	Requirements
TK-163	Y	74	<=15	11-01-90	Kb	Records of Capacity and Dimension
TK-165	Y	74	<=15	11-01-90	Kb	Records of Capacity and Dimension
TK-169	Y	74	<=15	11-01-90	Kb	Records of Capacity and Dimension
TK-158	Y	146	<=15	09-01-89	Kb	Records of Capacity and Dimension
TK-160	Y	146	<=15	09-01-89	Kb	Records of Capacity and Dimension
TK-162	Y	146	<=15	09-01-89	Kb	Records of Capacity and Dimension
TK-164	Y	146	<=15	09-01-89	Kb	Records of Capacity and Dimension
TK-167	Y	74	<=15	11-01-90	Kb	Records of Capacity and Dimension
TK-255	Y	74	<=15	04-01-91	Kb	Records of Capacity and Dimension
TK-174	Y	145	<=15	09-01-89	Kb	Records of Capacity and Dimension
TK-203	Y	74	<=15	12-01-91	Kb	Records of Capacity and Dimension

Based on the above determination, Operation Condition 12 is hereby amended as follows:

12. ~~Compliance with 326 IAC 12, and~~ 40 CFR ~~Part~~ **60,**~~.116(b), (d), and (f)~~**Subpart Kb** ~~Pursuant to 326 IAC 12, and 40 CFR 60.116b(b), the following shall apply:~~

~~(a) The Permittee shall keep readily accessible records showing the dimension and analysis showing the capacity of the following storage vessels: C64BTK162, C64BTK165,~~

~~C64BTK167, C64BTK169, C64ETK158, C64ETK160, C64ETK162, C64ETK164, C64ETK174, and C64FTK203.~~

~~(b) The Permittee shall notify the IDEM, OAM in the event of vapor pressure of the solvent stored in the tanks C64ETK158, C64ETK160, C64ETK162, C64ETK164, and C64ETK174, exceeds the respective maximum true vapor pressure values for each volume range.~~

~~(c) The Permittee shall measure the vapor pressure if the vapor pressure cannot be otherwise determined.~~

The owner or operator shall, for Tanks TK-163, TK-165, TK-169, TK-158, TK-160, TK-162, TK-164, TK-167, TK-255, TK-174, and TK-203, keep readily accessible records showing for each storage vessel:

(a) the respective dimensions, and
(b) an analysis showing the capacity of each storage vessel.

Said records shall be kept for the life of the source.

(f) Operation Condition 13:

Operation Condition 13 establishes the source production limit that keeps the modification from being a PSD major modification.

No changes to this condition are necessary.

(g) Operation Condition 14:

Operation Condition 14 establishes the record keeping requirements for Conditions 3, 4, 7, 8, 9, 10, 11,and 12.

No changes to the condition requirements are necessary. However, since this is a record keeping requirement, the condition header shall be changed to reflect the condition as a record keeping requirement.

14. ~~Reporting~~ **Record Keeping** Requirements
That a log of information necessary to document compliance with operation permit condition nos. 3, 4, 7, 8, 9, 10, 11, and 12 shall be maintained. These records shall be kept for at least the past 36 month period**,** ~~except for Condition n. 12(a), which shall be kept for the life of the storage tanks;~~ and made available upon request to the Office of Air ~~Management~~ **Quality** (OA~~M~~**Q**).

(h) Permit Unit Description:

The solvent storage tanks descriptions of paragraph (e) shall be revised to establish the regenerative thermal oxidizers as the add-n controls instead of the vent condensers.

(e) Solvent Storage:

(1) one (1) solvent storage tank (C64BTK163), nominal capacity of 19,494 gallons, controlled by a ~~vent condenser~~ **regenerative thermal oxidizer**;

(2) one (1) solvent storage tank (C64BTK165), nominal capacity of 19,494 gallons, controlled by a ~~vent condenser~~ **regenerative thermal oxidizer**;

(3) one (1) solvent storage tank (C64BTK167), nominal capacity of 19,494 gallons, controlled by a ~~vent condenser~~ **regenerative thermal oxidizer**;

(4) one (1) solvent storage tank (C64BTK169), nominal capacity of 19,494 gallons, controlled by a ~~vent condenser~~ **regenerative thermal oxidizer**;

(5) one (1) solvent storage tank (C64BTK158), nominal capacity of 38,551 gallons, controlled by a ~~vent condenser~~ **regenerative thermal oxidizer**;

(6) one (1) solvent storage tank (C64BTK160), nominal capacity of 38,551 gallons, controlled by a ~~vent condenser~~ **regenerative thermal oxidizer**;

(7) one (1) solvent storage tank (C64BTK162), nominal capacity of 38,551 gallons, controlled by a ~~vent condenser~~ **regenerative thermal oxidizer**;

(8) one (1) solvent storage tank (C64BTK164), nominal capacity of 38,551 gallons, controlled by a ~~vent condenser~~ **regenerative thermal oxidizer**;

(9) one (1) solvent storage tank (C64BTK174), nominal capacity of 19,494 gallons, controlled by a ~~vent condenser~~ **regenerative thermal oxidizer**;

(10) one (1) solvent storage tank (C64BTK203), nominal capacity of 19,494 gallons, controlled by a ~~vent condenser~~ **regenerative thermal oxidizer**;

(11) one (1) solvent storage tank (C64BTK255), nominal capacity of 19,494 gallons, controlled by a regenerative thermal oxidizer.

4. Registration Issued on 10/11/90:

This permit was issued for replacing several underground storage tanks with new above ground storage tanks in the solvent recovery operations. The registration states that vent condensers are required some of the tanks pursuant to 326 IAC 8-5-3. The vent condenser requirements specified in 326 IAC 8-5-3(b)(1) do not apply to the storage tanks. Therefore, these requirements should be removed from the registration.

This registration has 2 conditions that apply to the tanks.

The following is a description of the review of these conditions, the errors and inaccurate information found, and the changes that are made.

(a) First Condition:

The first condition tanks TK-174, TK-176, and TK-178 be controlled by vent condensers, pursuant to 326 IAC 8-5-3.

326 IAC 8-5-3 applies to the reactors, distillation units, dryers, storage units, transfer units, extraction equipment, filters, crystallizers, and centrifuges proposed in this modification because the units are listed applicable facilities, handle VOCs, and the units have potential to emit greater than the applicable level of 15 pounds per day*.

* Eli Lilly and Company, via a phone conversation, stated that since there was no means of determining the potential to emit of all the equipment listed in this permit, that the potential to emit can be assumed to be greater than the applicable level of 15 pounds per day.

The following lists the specific requirements under 326 IAC 8-5-3 and determines whether or not the rules apply to the units of this modification.

(1) 326 IAC 8-5-3(b)(1):

The control requirements of 326 IAC 8-5-3(b)(1) apply to all reactors, distillation operations, crystallizers, centrifuges, and vacuum dryers listed in this modification. Since the units of this modification are solvent recovery module tanks, the requirements of 326 IAC 8-5-3(b)(1) do not apply in this case.

(2) 326 IAC 8-5-3(b)(2):

The requirements of 326 IAC 8-5-3(b)(2) apply to all air dryers and production equipment exhaust sources existing as of July 1, 1990, in Clark, Elkhart, Floyd, Lake, Marion, Porter, and St. Joseph counties, and at new sources located in any county construction of which commences after July 1, 1990.

The requirements of 326 IAC 8-5-3(b)(2) do not apply to the equipment listed in this modification because the source is not located in Clark, Elkhart, Floyd, Lake, Marion, Porter, or St. Joseph counties and the source was existing on July 1, 1990.

(3) 326 IAC 8-5-3(b)(3):

The requirements of 326 IAC 8-5-3(b)(3) apply to Tanks TK-161, TK-167, TK-171, TK-173, TK-158, TK-160, TK-162, TK-164, TK-166, TK-168, TK-172, TK-174, TK-176, and TK-178, because these tanks store liquids that contain VOCs.

(4) 326 IAC 8-5-3(b)(4):

The requirements of 326 IAC 8-5-3(b)(4) do not apply to the storage tanks of this modification because 326 IAC 8-5-3(b)(4) applies specifically to centrifuges, rotary vacuum filters, and other filters, not storage tanks.

(5) 326 IAC 8-5-3(b)(5):

The requirements of 326 IAC 8-5-3(b)(5) do not apply to the storage tanks of this modification because the tanks are not “inprocess” tanks.

(6) 326 IAC 8-5-3(b)(6):

The requirements of 326 IAC 8-5-3(b)(6) apply to the storage tanks listed in this registration because 326 IAC 8-5-3(b)(6) applies to all reactors, distillation operations, crystallizers, centrifuges, and vacuum dryers, all storage tanks, transfer equipment, extraction equipment, and filters.

Based on the above determination, condition 1 is hereby amended as follows:

1. Pursuant to 326 IAC 8-5-3**,** ~~volatile organic compound emissions from Tank Nos. TK-174, TK-176, and TK-178 shall be controlled by condensers. (copy enclosed)~~ **the owner or operator shall, for Tanks TK-161, TK-167, TK-171, TK-173, TK-158, TK-160, TK-162, TK-164, TK-166, TK-168, TK-172, TK-174, TK-176, and TK-178:**

(a) provide a vapor balance system or equivalent control that is at least ninety percent (90%) effective in reducing emissions from truck or railcar deliveries to storage tanks with capacities greater than seven thousand five hundred (7,500) liters (two thousand (2,000) gallons) that store VOC with vapor pressures greater than twenty-eight (28) kiloPascals (four and one-tenth (4.1) pounds per square inch) at twenty degrees Celsius (20°C),

(b) install pressure/vacuum conservation vents set at plus or minus two-tenths (+-0.2) kilo Pascals on all storage tanks that store VOC with vapor pressures greater than ten (10) kiloPascals (one and five-tenths (1.5) pounds per square inch at twenty degrees Celsius (20°C)), unless a more effective control system is used, and

(c) repair all leaks from which a liquid, containing VOC, can be observed running or dripping. The repair shall be completed the first time the equipment is off line for a period of time long enough to complete the repair.

This condition was not numbered in the registration. This condition has therefore been designated as Condition 1.

(b) Second Condition:

The second condition required tanks TK-172, TK-176, and TK-178 to have vent condensers, records for tanks 168, 172, 176, and 178, reports for tanks 158, 160, 162, 164, 166, 168, and 174, and the dimensions of all fourteen tanks.

40 CFR 60, Subpart Kb, applies to each volatile organic liquid storage vessel with a capacity greater than or equal to 40 cubic meters.

The following is a review of 40 CFR 60, Subpart Kb and it's applicability.

Tanks TK-161, TK-167, TK-171, TK-173, TK-158, TK-160, TK-162, TK-164, TK-166, TK-168, TK-172, TK-174, TK-176, and TK-178, each store volatile organic liquids, were constructed, reconstructed, or modified after July 23, 1984, have capacities greater than 40 cubic meters, and have true vapor pressures less than or equal to 15 kiloPascals. Therefore, pursuant to 40 CFR 60.110b(b) and (c), these tanks are subject to the requirements of 40 CFR 60.116b(a) and (b).

Tank	VOL ?	Capacity (m3)	TVP (kPa)	Const. Date	Rule	Requirements
TK-161	Y	74	<=15	11-01-90	Kb	Records of Capacity and Dimension
TK-167	Y	74	<= 15	11-01-90	Kb	Records of Capacity and Dimension
TK-171	Y	74	<=15	11-01-90	Kb	Records of Capacity and Dimension
TK-173	Y	74	<=15	11-01-90	Kb	Records of Capacity and Dimension
TK-158	Y	146	<=15	09-01-89	Kb	Records of Capacity and Dimension
TK-160	Y	146	<=15	09-01-89	Kb	Records of Capacity and Dimension
TK-162	Y	146	<=15	09-01-89	Kb	Records of Capacity and Dimension
TK-164	Y	146	<=15	09-01-89	Kb	Records of Capacity and Dimension
TK-166	Y	146	<=15	09-01-89	Kb	Records of Capacity and Dimension
TK-168	Y	146	<=15	09-01-89	Kb	Records of Capacity and Dimension
TK-172	Y	145	<=15	09-01-89	Kb	Records of Capacity and Dimension
TK-174	Y	145	<=15	09-01-89	Kb	Records of Capacity and Dimension
TK-176	Y	145	<=15	09-01-89	Kb	Records of Capacity and Dimension
TK-178	Y	145	<=15	09-01-89	Kb	Records of Capacity and Dimension

Based on the above determination, the requirements of the registration are changed as follows:

~~Pursuant to 326 IAC 12 (40 CFR Part 60.110b-60.117b, Subpart Kb)~~

~~(1) Tank Nos. TK-172, TK-176, and TK-178 shall require condensers with a minimum control efficiency of 95%,~~

~~(2) Tank Nos. TK-168, TK-172, TK-176, and TK-178 shall record all VOC's stored, and the duration and vapor pressure of each VOC stored,~~

~~(3) Tank Nos. TK-158, TK-160, TK-162, TK-164, TK-166, TK-168, and TK-174 shall report when any VOCs with a vapor pressure greater than 4 psi is stored in any of these tanks, and~~

~~(4) The dimensions of all fourteen tanks shall be kept in a readily acceptable place.~~

2. The owner or operator shall, for Tanks TK-161, TK-167, TK-171, TK-173, TK-158, TK-160, TK-162, TK-164, TK-166, TK-168, TK-172, TK-174, TK-176, and TK-178, keep readily accessible records showing for each storage vessel:

(a) the respective dimensions, and
(b) an analysis showing the capacity of each storage vessel.

Said records shall be kept for the life of the source.

This condition was not numbered in the registration. This Condition has therefore been designated as Condition 2.

(c) Control Requirements (New Condition 3) :

This modification does not have any limits or standards that require the use of add-on controls and it has been determined that the requirements of the newly promulgated NESHAP (40 CFR 63, Subpart GGG) need not be applied under this amendment.

However, even though no add-on controls are required, Eli Lilly and Company has stated that they wish to establish the regenerative thermal oxidizers as the add-on controls under this amendment in anticipation of addressing the requirements of Subpart GGG in their Part 70 permit.

Therefore, the regenerative thermal oxidizers shall be established as add-on controls as follows:

(1) a new condition (Condition 3) shall be added, requiring the solvent recovery module tank VOC emissions be controlled by regenerative thermal oxidizers and that the thermal oxidizers be operated at all times the units of the solvent recovery modules are in operation;
(2) no thermal oxidizer operating parameters shall be required at this time because the add-on controls are not required to meet any applicable requirements at this time; and
(3) no stack testing of the thermal oxidizers shall be required because there are no operating parameters that need to be established at this time.

Based on the above determination, new condition 3 is hereby added:

3. The owner or operator shall control the volatile organic compound (VOC) emissions from Tanks TK-161, TK-167, TK-171, TK-173, TK-158, TK-160, TK-162, TK-164, TK-166, TK-168, TK-172, TK-174, TK-176, and TK-178, utilizing existing regenerative thermal oxidizers, with said thermal oxidizers being operated at all times liquids containing VOCs are stored in the tanks listed in this condition.

(d) Unit Description:

Since the regenerative thermal oxidizers have replaced the vent condensers, the unit description of the introductory paragraph is amended as follows:

Your application has bee reviewed. Based on the data submitted and the provisions of Sections 1 and 2 of 326 IAC 21, it has been determined that the following, to be located on SR63, Clinton, Indiana is classified as registered: the replacement of thirteen underground storage tanks with fourteen aboveground storage tanks with volatile organic compounds controlled by ~~condensers~~ **regenerative thermal oxidizers**. The new storage tanks will be labelled Nos. TK-161, TK-167, TK-171, TK-173, TK-158, TK-160, TK-162, TK-164, TK-166, TK-168, TK-172, TK-174, TK-176, and TK-178.

5. Registration 165-2031-00009:

This permit was issued to allow the replacement of several underground storage tanks with new above ground storage tanks in the solvent recovery operations. The registration states that some of the vent condensers must meet a minimum control efficiency of 95% pursuant to 40 CFR 60, Subpart Kb. None of the tanks listed in this registration have true vapor pressures or capacities that exceed the applicable levels. Therefore, this requirement should be removed from the registration.

This registration has 2 conditions that apply to the tanks.

The following is a description of the review of these conditions, the errors and inaccurate information found, and the changes that are made.

(a) Condition 1:

Condition 1 requires a vapor balance system or equivalent for storage tanks TK-210 and 226, pursuant to 326 IAC 8-5-3.

326 IAC 8-5-3 applies to the reactors, distillation units, dryers, storage units, transfer units, extraction equipment, filters, crystallizers, and centrifuges proposed in this modification because the units are listed applicable facilities, handle VOCs, and the units have potential to emit greater than the applicable level of 15 pounds per day*.

* Eli Lilly and Company, via a phone conversation, stated that since there was no means of determining the potential to emit of all the equipment listed in this permit, that the potential to emit can be assumed to be greater than the applicable level of 15 pounds per day.

The following lists the specific requirements under 326 IAC 8-5-3 and determines whether or not the rules apply to the units of this modification.

(1) 326 IAC 8-5-3(b)(1):

The control requirements of 326 IAC 8-5-3(b)(1) apply to all reactors, distillation operations, crystallizers, centrifuges, and vacuum dryers listed in this modification. Since the units of this modification are solvent recovery module tanks, the requirements of 326 IAC 8-5-3(b)(1) do not apply in this case.

(2) 326 IAC 8-5-3(b)(2):

The requirements of 326 IAC 8-5-3(b)(2) apply to all air dryers and production equipment exhaust sources existing as of July 1, 1990, in Clark, Elkhart, Floyd, Lake, Marion, Porter, and St. Joseph counties, and at new sources located in any county construction of which commences after July 1, 1990.

The requirements of 326 IAC 8-5-3(b)(2) do not apply to the equipment listed in this modification because the source is not located in Clark, Elkhart, Floyd, Lake, Marion, Porter, or St. Joseph counties and the source was existing on July 1, 1990.

(3) 326 IAC 8-5-3(b)(3):

The requirements of 326 IAC 8-5-3(b)(3) apply to Tanks TK-209, TK-216, TK-219, TK-229, TK-230, TK-231, TK-232, TK-233, TK-235, TK-237, TK-243, TK-245, TK-247, and TK-248 because these tanks store liquids that contain VOCs.

(4) 326 IAC 8-5-3(b)(4):

The requirements of 326 IAC 8-5-3(b)(4) do not apply to the storage tanks of this modification because 326 IAC 8-5-3(b)(4) applies specifically to centrifuges, rotary vacuum filters, and other filters, not storage tanks.

(5) 326 IAC 8-5-3(b)(5):

The requirements of 326 IAC 8-5-3(b)(5) do not apply to the storage tanks of this modification because the tanks are not “inprocess” tanks.

(6) 326 IAC 8-5-3(b)(6):

The requirements of 326 IAC 8-5-3(b)(6) apply to the storage tanks listed in this registration because 326 IAC 8-5-3(b)(6) applies to all reactors, distillation operations, crystallizers, centrifuges, and vacuum dryers, all storage tanks, transfer equipment, extraction equipment, and filters.

Based on the above determination, condition 1 is hereby amended as follows:

1. ~~That~~ Pursuant to 326 IAC 8-5-3 ~~a vapor balance system or equivalent providing at least 90% reduction in VOC emissions from the unloading of solvents to the storage tanks is required for storage tank Nos. TK-210 and TK-226. Since the tank car vapors will vent through the storage tank vent condensers, the vent condensers are considered an equivalent control.~~**, the owner or operator shall, for Tanks TK-209, TK-216, TK-219, TK-229, TK-230, TK-231, TK-232, TK-233, TK-235, TK-237, TK-243, TK-245, TK-247, and TK-248:**

   (a) provide a vapor balance system or equivalent control that is at least ninety percent (90%) effective in reducing emissions from truck or railcar deliveries to storage tanks with capacities greater than seven thousand five hundred (7,500) liters (two thousand (2,000) gallons) that store VOC with vapor pressures greater than twenty-eight (28) kiloPascals (four and one-tenth (4.1) pounds per square inch) at twenty degrees Celsius (20°C),

   (b) install pressure/vacuum conservation vents set at plus or minus two-tenths (+-0.2) kilo Pascals on all storage tanks that store VOC with vapor pressures greater than ten (10) kiloPascals (one and five-tenths (1.5) pounds per square inch at twenty degrees Celsius (20°C)), unless a more effective control system is used, and

   (c) repair all leaks from which a liquid, containing VOC, can be observed running or dripping. The repair shall be completed the first time the equipment is off line for a period of time long enough to complete the repair.

(b) Condition 2:

Condition 2 requires that the dimensions of tanks 208, 209, 210, 212, 214, 216, 219, 225 to 233, 235, 237, 243, 245, 247, and 248 and requires vent condensers as add-on controls for tanks 210, 212, 226, and 228.

40 CFR 60, Subpart Kb, applies to each volatile organic liquid storage vessel with a capacity greater than or equal to 40 cubic meters.

The following is a review of 40 CFR 60, Subpart Kb, it’s applicability to the storage tanks proposed in this modification, and the requirements that apply.

Volatile organic liquids have never been stored in Tanks TK-201, TK-203, TK-208, TK-210, TK-212, TK-214, TK-225, TK-226, TK-227, and TK-228. Thus 40 CFR 60, Subpart Kb does not apply to these tanks.

Tanks TK-209, TK-216, TK-219, TK-229, TK-230, TK-231, TK-232, TK-233, TK-235, TK-237, TK-243, TK-245, TK-247, and TK-248, each store volatile organic liquids, were constructed, reconstructed, or modified after July 23, 1984, have capacities greater than 40 cubic meters, and have true vapor pressures less than or equal to 15 kiloPascals. Therefore, pursuant to 40 CFR 60.110b(b) and (c), these tanks are subject to the requirements of 40 CFR 60.116b(a) and (b).

Tank	VOL ?	Capacity (m3)	TVP (kPa)	Const. Date	Rule	Requirements
TK-201	N	-	-	-	-	None
TK-203	N	-	-	-	-	None
TK-208	N	-	-	-	-	None
TK209	Y	74	<=15	12-01-91	Kb	None
TK-210	N	-	-	-	-	None
TK-212	N	-	-	-	-	None
TK-214	N	-	-	-	-	None
TK-216	Y	144	<=15	12-01-90	Kb	Records of Capacity and Dimension
TK-219	Y	74	<=15	12-01-91	Kb	Records of Capacity and Dimension
TK-225	N	-	-	-	-	None
TK-226	N	-	-	-	-	None
TK-227	N	-	-	-	-	None
TK-228	N	-	-	-	-	None
TK-229	Y	74	<=15	01-01-91	Kb	Records of Capacity and Dimension
TK-230	Y	146	<=15	01-01-91	Kb	Records of Capacity and Dimension
TK-231	Y	74	<=15	01-01-91	Kb	Records of Capacity and Dimension
TK-232	Y	146	<=15	01-01-91	Kb	Records of Capacity and Dimension
TK-233	Y	74	<=15	01-01-91	Kb	Records of Capacity and Dimension
TK-235	Y	74	<=15	01-01-91	Kb	Records of Capacity and Dimension
TK-237	Y	74	<=15	01-01-91	Kb	Records of Capacity and Dimension
TK-243	Y	74	<=15	01-01-91	Kb	Records of Capacity and Dimension
TK-245	Y	74	<=15	01-01-91	Kb	Records of Capacity and Dimension
TK-247	Y	74	<=15	01-01-91	Kb	Records of Capacity and Dimension
TK-248	Y	146	<=15	01-01-91	Kb	Records of Capacity and Dimension

Based on the above determination, Condition 2 is hereby amended as follows:

~~2. That pursuant to 326 IAC 12 (40 CFR Part 60.110b - 60.117b, Subpart Kb), New Source Performance Standards (NSPS) for Storage Vessels for Petroleum Liquids,~~

~~(a) The dimensions of the storage tanks shall be kept in a readily accessible place, paragraph 116(b) for tank Nos. TK-208, TK-209, TK-210, TK-212, TK-214, TK-216, TK-219, TK-225, to TK-233, TK-235, TK-237, TK-243, TK-245, TK-247, and TK-248. Tank Nos. TK-201 and TK-203 store water and are not subject to the NSPS rule.~~

~~(b) Storage tank Nos. TK-210, TK-212, TK-226, and TK-228 shall require the reduction of VOC emissions by at 95%, paragraph 112(b)(a). Each tank will be equipped with vent condensers rated at greater than 95% control efficiency.~~

2. The owner or operator shall, for Tanks TK-209, TK-216, TK-219, TK-229, TK-230, TK-231, TK-232, TK-233, TK-235, TK-237, TK-243, TK-245, TK-247, and TK-248, keep readily accessible records showing for each storage vessel:

(a) the respective dimensions, and
(b) an analysis showing the capacity of each storage vessel.

Said records shall be kept for the life of the source.

(c) Control Requirements (New Condition 3):

This modification does not have any limits or standards that require the use of add-on controls and it has been determined that the requirements of the newly promulgated NESHAP (40 CFR 63, Subpart GGG) need not be applied under this amendment.

However, even though no add-on controls are required, Eli Lilly and Company has stated that they wish to establish the regenerative thermal oxidizers as the add-on controls under this amendment in anticipation of addressing the requirements of Subpart GGG in their Part 70 permit .

Therefore, the regenerative thermal oxidizers shall be established as add-on controls as follows:

(1) a new condition (Condition 3) shall be added, requiring the solvent recovery module tank VOC emissions be controlled by regenerative thermal oxidizers and that the thermal oxidizers be operated at all times the units of the solvent recovery modules are in operation;
(2) no thermal oxidizer operating parameters shall be required at this time because the add-on controls are not required to meet any applicable requirements at this time; and
(3) no stack testing of the thermal oxidizers shall be required because there are no operating parameters that need to be established at this time.

Based on the above determination, new condition 3 is hereby added:

3. The owner or operator shall control the volatile organic compound (VOC) emissions from Tanks TK-209, TK-216, TK-219, TK-229, TK-230, TK-231, TK-232, TK-233, TK-235, TK-237, TK-243, TK-245, TK-247, and TK-248, utilizing existing regenerative thermal oxidizers, with said thermal oxidizers being operated at all times liquids containing VOCs are stored in the tanks listed in this condition.

(d) Unit Description:

Since the regenerative thermal oxidizers have replaced the vent condensers, the unit description of the introductory paragraph is amended as follows:

Your application has been reviewed. Based on the data submitted and the provisions in Sections 1 and 2 of 326 IAC 2-1, it has been determined that the following, to be located on SR 63N near Clinton, Indiana, is classified as registered: the replacement of 10 underground storage tanks in Bldg. No. C64F with 15 above ground storage tanks and 9 underground storage tanks in Bldg. No. C64G with 9 above ground storage tanks. All of the storage tanks will have volatile organic compound (VOC) emissions controlled with ~~refrigerated condensers~~ **regenerative thermal oxidizers**. All of the storage tanks will be either 19,500 gallons or 38,500 gallons. The new tanks are Nos. TK-201, TK-203, TK-208, TK-209, TK-210, TK-212, TK-214, TK-216, TK-219, TK-225 to TK-233, TK-235, TK-237, TK-243, TK-245, TK-247, and TK-248.

6. Registration 165-2531-00009:

This permit was issued for the purposes of adding several tanks to module H of the solvent recovery operations. This registration requires the use of vent condensers on several of the tanks. However, the registration does not state the authority for requiring the vent condensers. Therefore, the registration should be revised to clarify that the control device requirements of Subpart Kb do not apply and that vent condensers are not required.

Registration 165-2531-00009 has 4 conditions that apply to the tanks of the solvent recovery tank modules. The conditions are not numbered.

The following is a description of the review of these conditions, the errors and inaccurate information found, and the changes that are made.

(a) First Condition:

The first condition requires records be kept pursuant to the requirements of 40 CFR 60.116b(b).

40 CFR 60, Subpart Kb, applies to each volatile organic liquid storage vessel with a capacity greater than or equal to 40 cubic meters.

Volatile organic liquids have never been stored in Tanks TK-249, TK-257, TK-263, TK-265, TK-266, TK-267, TK-270, and TK-272. Thus, 40 CFR 60, Subpart Kb does not apply to these tanks.

Tanks TK-253, TK-256, TK-258, TK-259, TK-260, TK-261, TK-262, TK-264, TK-268, TK-269, and TK-271, each store volatile organic liquids, were constructed, reconstructed, or modified after July 23, 1984, have capacities greater than 40 cubic meters, and have true vapor pressures less than or equal to 15 kiloPascals. Therefore, pursuant to 40 CFR 60.110b(b) and (c), these tanks are subject to the requirements of 40 CFR 60.116b(a) and (b).

Tank	VOL ?	Capacity (m3)	TVP (kPa)	Const. Date	Rule	Requirements
TK-249	N	-	-	-	-	None
TK-253	Y	74	<=15	04-01-91	Kb	Records of Capacity and Dimension
TK-256	Y	146	<=15	04-01-91	Kb	Records of Capacity and Dimension
TK-257	N	-	-	-	-	None
TK-258	Y	146	<=15	04-01-91	Kb	Records of Capacity and Dimension
TK-259	Y	74	<=15	04-01-91	Kb	Records of Capacity and Dimension
TK-260	Y	146	<=15	04-01-91	Kb	Records of Capacity and Dimension
TK-261	Y	74	<=15	04-01-91	Kb	Records of Capacity and Dimension
TK-262	Y	146	<=15	04-01-91	Kb	Records of Capacity and Dimension
TK-263	N	-	-	-	-	None
TK-264	Y	146	<=15	04-01-91	Kb	Records of Capacity and Dimension
TK-265	N	-	-	-	-	None
TK-266	N	-	-	-	-	None
TK-267	N	-	-	-	-	None
TK-268	Y	146	<=15	04-01-91	Kb	Records of Capacity and Dimension
TK-269	Y	74	<=15	04-01-91	Kb	Records of Capacity and Dimension
TK-270	N	-	-	-	-	None
TK-271	Y	74	<=15	04-01-91	Kb	Records of Capacity and Dimension
TK-272	N	-	-	-	-	None

Based on the above determination, the first condition of the registration is hereby amended as follows:

~~Records of storage capacity and physical dimensions shall be maintained for all nineteen (19) storage tanks, pursuant to 40 CFR 60.11b(b).~~

1. The owner or operator shall, for Tanks TK-253, TK-256, TK-258, TK-259, TK-260, TK-261, TK-262, TK-264, TK-268, TK-269, and TK-271, keep readily accessible records showing for each storage vessel:

(a) the respective dimensions, and
(b) an analysis showing the capacity of each storage vessel.

Said records shall be kept for the life of the source.

This condition was not numbered in the registration. This condition has therefore been designated as Condition 1.

(b) Second Condition:

The second condition requires initial physical tests for tanks 268, 270, and 272, pursuant to 40 CFR 60.116b(f). As previously determined, tanks 268, 270, and 272, are only subject to the requirements of 40 CFR 60.116b(a) and (b).

Therefore, the requirements of this condition no longer apply and this condition is hereby removed.

~~The three (3) waste recovery tanks, numbered 268, 270, and 272 shall be subject to initial physical tests of their vapor pressures. If a tank is determined to have a maximum vapor pressure between 15 to 27.6 kPa, then the vapor pressure shall be tested every six months and records shall be kept of the liquid being stored, the period of time the liquid was stored and the vapor pressure of the stored liquid, pursuant to 40 CFR 60.116b(f).~~

(c) Third Condition:

The third condition requires for tanks 266, 270, and 272, an operating plan pursuant to 40 CFR 60.115b(c), records pursuant to 40 CFR 60.7(b), notification of anticipated startup pursuant to 40 CFR 60.7(a)(2) and 60.113b(c)(1), and notification of actual startup pursuant to 40 CFR 60.7(a)(3). As previously determined, tanks 266, 270, and 272, are only subject to the requirements of 40 CFR 60.116b(a) and (b).

Therefore, the requirements of this condition no longer apply and this condition is hereby removed.

~~The three (3) tanks numbered 266, 270 and 272 shall be subject to the following requirements:~~

~~(a) An operating plan for the tanks and vent condensers shall be maintained pursuant to 40 CFR 60.115b(c).~~

~~(b) Records of startups, shutdowns and malfunctions shall be maintained pursuant to 40 CFR 60.7(b).~~

~~(c) The Office of Air Management Enforcement Section shall be notified of the anticipated startup date no earlier than 60 days and no later than 30 days prior to such date, pursuant to 40 CFR 60.7(a)(2) and 60.113b(c)(1). The operating plan shall be submitted with the notice.~~

~~(d) The Office of Air Management Enforcement Section shall be notified of the actual startup date no later than 15 days after such date, pursuant to 40 CFR 60.7(a)(3).~~

(d) Fourth Condition:

The fourth condition states that there are no storage tanks under this registration that have uncontrolled VOC emissions exceeding 15 pounds per day. Thus, 326 IAC 8-5-3 does not apply.

Since this condition is simply a statement and not a requirement, it is determined that this condition is not necessary. Thus, this condition is hereby removed.

~~Since none of the tanks have potential uncontrolled point source emissions of volatile organic compounds exceeding 15 pounds per day, the synthesized pharmaceutical manufacturing rule, 326 IAC 8-5-3, does not apply.~~

(e) Control Requirements (New Condition 2):

This modification does not have any limits or standards that require the use of add-on controls and it has been determined that the requirements of the newly promulgated NESHAP (40 CFR 63, Subpart GGG) need not be applied under this amendment.

However, even though no add-on controls are required, Eli Lilly and Company has stated that they wish to establish the regenerative thermal oxidizers as the add-on controls under this amendment in anticipation of addressing the requirements of Subpart GGG in their Part 70 permit .

Therefore, the regenerative thermal oxidizers shall be established as add-on controls as follows:

(1) a new condition (Condition 2) shall be added, requiring the solvent recovery module tank VOC emissions be controlled by regenerative thermal oxidizers and that the thermal oxidizers be operated at all times the units of the solvent recovery modules are in operation;
(2) no thermal oxidizer operating parameters shall be required at this time because the add-on controls are not required to meet any applicable requirements at this time; and
(3) no stack testing of the thermal oxidizers shall be required because there are no operating parameters that need to be established at this time.

Based on the above determination, new condition 2 is hereby added:

2. The owner or operator shall control the volatile organic compound (VOC) emissions from Tanks TK-253, TK-256, TK-258, TK-259, TK-260, TK-261, TK-262, TK-264, TK-268, TK-269, and TK-271, utilizing existing regenerative thermal oxidizers, with said thermal oxidizers being operated at all times liquids containing VOCs are stored in the tanks.

(f) Unit Description:

Since the regenerative thermal oxidizers have replaced the vent condensers, the unit description of the introductory paragraph is amended as follows:

.....Emissions from ~~six (6)~~ tanks ~~numbered 257, 258, 266, 268, 270, and 272~~ **TK-253, TK-256, TK-258, TK-259, TK-260, TK-261, TK-262, TK-264, TK-268, TK-269, and TK-271** shall be controlled by ~~vent condensers utilizing Syltherm as the cooling media at a temperature of -65ºF~~ **regenerative thermal oxidizers**.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this amendment with the original permit.

Sincerely,

Original Signed by Paul Dubenetzky
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

SDF

cc: File - Vermillion County
Vermillion County Health Department
Air Compliance Section Inspector - Jim Thorpe
Compliance Data Section - Jerri Curless
Permit Tracking - Janet Mobley
Air Programs Section - Nancy Landau

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Significant Permit Revision to a Federally Enforceable State Operating Permit (FESOP)

Source Background and Description

Source Name:	Central Paving, Incorporated
Source Location:	2403 South County Road 150 East, Logansport, Indiana 46947
County:	Cass
SIC Code:	2951
Operation Permit No.:	F017-7088-03118
Operation Permit Issuance Date:	July 10, 1997
2nd Significant Permit Revision No.:	017-13667-03118
Permit Reviewer:	SDF

On June 25, 2001, the Office of Air Quality (OAQ) received an application from Eli Lilly and Company relating to the changes described as follows.

Eli Lilly has become subject to the pharmaceutical production MACT promulgated under 40 CFR 63, Subpart GGG. This rule requires Eli Lilly to achieve an overall control efficiency of 95% for the solvent recovery tank module fixed roof storage tanks.

Currently, the vent condensers are used by Lilly to control the storage tank emissions. The vent condensers cannot achieve an overall control efficiency of 95%. Therefore, Eli Lilly and Company has proposed controlling the storage tank emissions utilizing existing RTOs permitted under 165-2846-00009, issued on XXXXX.

Typically, the changes proposed by Eli Lilly and Company are incorporated into their single operating permit via an amendment, revision, or modification. However, since the source operating permit (165-6462-00009) is still pending, the proposed changes must be incorporated into their respective individual existing permits.

The fixed roof storage tanks of the solvent recovery tank modules are permitted under the following existing approvals.

(1)	~~Construction Permit~~	~~165-1951~~
(2)	Construction Permit	165-3801
(3)	Construction Permit	165-9135
(4)	~~Registration~~	~~Issued on 10/11/90~~
(5)	~~Registration~~	~~165-2031~~
(6)	~~Registration~~	~~165-2531~~

These permits shall be changed as follows:

1. Construction Permit 165-1951-00009:

This permit was issued for a capacity expansion of their bulk pharmaceutical operations. Under this permit, the fugitive and point source VOC emissions from all of the equipment listed in the permit be limited to less than 39.6 tons per year.

In order to meet this limitation and provide quarterly reports as required by the permit, Lilly has developed an internal management system for recording VOC emissions from the permitted equipment. Lilly will modify this system to incorporate the control device change from vent condensers to regenerative thermal oxidizers (RTOs). However, this will not necessitate a permit amendment.

Eli Lilly and Company has discovered an administrative error in Operation Condition 4(a) which states that pursuant to 326 IAC 8-5-3, surface condensers or equivalent are required for storage tanks. This is incorrect and should be amended as described later in this document.

The following is a description of the permit review conducted and the changes that will be made.

(a) 326 IAC 8-4-3 Applicability:

326 IAC 8-4-3 does not apply to any of the tanks because the worst case capacity of any of the tanks 146 m^3 (38,570 gallons) is less than the applicable level of 39,000 gallons.

(b) 326 IAC 8-5-3 Applicability:

Operation Condition 4 of this permit lists the requirements of 326 IAC 8-5-3.

326 IAC 8-5-3 applies to the facilities of this permit because the applicable units store VOCs, are listed applicable facilities, and Bryan Sheets of Eli Lilly and Company stated in a phone conversation, that since there was no means of determining the potential to emit of all the equipment listed in this permit, that the potential to emit can be assumed to be greater than the applicable level of 15 pounds per day.

The following is an analysis of 326 IAC 8-5-3 and the resultant condition that will be incorporated into the registration.

(1) The control requirements of 326 IAC 8-5-3(b)(1) apply to all reactors, distillation operations, crystallizers, centifuges, and vacuum dryers, not the storage tanks, transfer equipment, extraction equipment, and other filters.

The requirements of 326 IAC 8-5-3(b)(1) do not apply in this case because the units registered in this permit are storage tanks.

(2) The requirements of 326 IAC 8-5-3(b)(2) apply to all air dryers and production equipment exhaust sources existing as of July 1, 1990, in Clark, Elkhart, Floyd, Lake, Marion, Porter, and St. Joseph counties and at new sources located in any county construction of which commences after July 1, 1990.

The requirements of 326 IAC 8-5-3(b)(2) do not apply in this case because the source is not located in Clark, Elkhart, Floyd, Lake, Marion, Porter, or St. Joseph counties and the source was existing on July 1, 1990.

(3) The requirements of 326 IAC 8-5-3(b)(3) apply to the storage tanks listed in this registration because 326 IAC 8-5-3(b)(3) applies specifically to storage tanks.

(4) The requirements of 326 IAC 8-5-3(b)(4) apply to all reactors, distillation operations, crystallizers, centifuges, and vacuum dryers, storage tanks, transfer equipment, extraction equipment, and filters listed in the permit.

(5) The requirements of 326 IAC 8-5-3(b)(5) apply to all reactors, distillation operations, crystallizers, centifuges, and vacuum dryers, storage tanks, transfer equipment, extraction equipment, and filters listed in the permit.

(6) The requirements of 326 IAC 8-5-3(b)(6) apply to all reactors, distillation operations, crystallizers, centifuges, and vacuum dryers, storage tanks, transfer equipment, extraction equipment, and filters listed in the permit.

Based on this analysis, the condition containing the 326 IAC 8-5-3 requirements shall be changed as follows:

4. ~~That these facilities shall comply with 326 IAC 8-5-3(a). This rule requires:~~

~~(a) surface condensers or equivalent on reactors, distillation columns, dryers, extruders, filters, crystallizers, centrifuges, and storage tanks, paragraph (1),~~

~~(b) vapor balance or equivalent with a minimum of 90% control on all railroad deliveries to storage tanks, paragraph (3),~~

~~(c) enclosures of all centrifuges and rotary vacuum filters with exposed liquid surfaces with vapor pressures greater than 0.5 psi, paragraph (4),~~

~~(d) covers on all process tanks, paragraph (5),~~

~~(e) repairs of all leaks the first time the unit is off line long enough to make the repair, paragraph (6), and~~

Pursuant to 326 IAC 8-5-3, the owner or operator shall:

(a) control the volatile organic compound (VOC) emissions from all reactors, distillation operations, crystallizers, centrifuges, and vacuum dryers utilizing surface condensers or their equivalent.

(1) If surface condensers are used, the condenser outlet gas temperature shall not exceed:

(A) minus twenty-five degrees Celsius (-25°C) when condensing VOC of vapor pressure greater than forty (40) kiloPascals (five and eight-tenths (5.8) pounds per square inch),
(B) minus fifteen degrees Celsius (-15°C) when condensing VOC of vapor pressure greater than twenty (20) kiloPascals (two and nine-tenths (2.9) pounds per square inch),
(C) zero degrees Celsius (0°C) when condensing VOC of vapor pressure greater than ten (10) kiloPascals (one and five-tenths (1.5) pounds per square inch),

(D) ten degrees Celsius (10°C) when condensing VOC of vapor pressure greater than seven (7) kiloPascals (one (1) pound per square inch), or

(E) twenty-five degrees Celsius (25°C) when condensing VOC of vapor pressure greater than three and five-tenths (3.5) kiloPascals (five-tenths (0.5) pound per square inch).

The vapor pressures listed in Part (a) of this condition shall be measured in at twenty degrees Celsius (20°C).

(2) If equivalent controls are used, the VOC emissions must be reduced by at least as much as they would be by using a surface condenser which meets the requirements of Part (a) of this Condition.

(b) for the reactors, distillation operations, dryers, storage tanks, transfer equipment, extraction equipment, filters, crystallizers, and centrifuges:

(1) provide a vapor balance system or equivalent control that is at least ninety percent (90%) effective in reducing emissions from truck or railcar deliveries to storage tanks with capacities greater than seven thousand five hundred (7,500) liters (two thousand (2,000) gallons) that store VOC with vapor pressures greater than twenty-eight (28) kiloPascals (four and one-tenth (4.1) pounds per square inch) at twenty degrees Celsius (20°C), and

(2) install pressure/vacuum conservation vents set at plus or minus two-tenths (+-0.2) kiloPascals on all storage tanks that store VOC with vapor pressures greater than ten (10) kiloPascals (one and five-tenths (1.5) pounds per square inch at twenty degrees Celsius (20°C)), unless a more effective control system is used.

(3) enclose all centrifuges, rotary vacuum filters, and other filters having an exposed liquid surface, where the liquid contains VOC and exerts a total VOC vapor pressure of three and five-tenths (3.5) kiloPascals (five-tenths (0.5) pounds per square inch) or more at twenty degrees Celsius (20°C).

(4) install covers on all inprocess tanks containing a volatile organic compound at any time. These covers must remain closed, unless production, sampling, maintenance, or inspection procedures require operator access.

(5) repair all leaks from which a liquid, containing VOC, can be observed running or dripping. The repair shall be completed the first time the equipment is off line for a period of time long enough to complete the repair.

(c) 326 IAC 8-9:

326 IAC 8-9 does not apply to any of the tanks because the source is not located in any of the applicable counties (Clark, Floyd, Lake, and Porter).

(d) 326 IAC 8-1-6:

326 IAC 8-1-6 does not apply to any of the tanks because 326 IAC 8-5-3 applies to the applicable units.

(e) 40 CFR 60, Subpart K:

40 CFR 60, Subpart K does not apply to any of the tanks because none of the tanks were constructed prior to May 19, 1978.

(f) 40 CFR 60, Subpart Ka:

40 CFR 60, Subpart Ka does not apply to any of the tanks because all of the tanks were constructed after the latest applicable date of July 23, 1984.

(g) 40 CFR 60, Subpart Kb:

Condition 2 of the registration lists the storage tank requirements of 40 CFR 60, Subpart Kb. Eli Lilly has stated that the requirements listed in this condition are incorrect.

The following is a list of the results of the Subpart Kb applicability determination.

Tank	VOL ?	Capacity (m3)	TVP (kPa)	Const. Date	Mod. Date	Rule	Requirements
TK-202	Y	144	<=15	01-01-91	-	Kb	Records of Cap. and Dimension
TK-204	Y	144	<=15	01-01-91	-	Kb	Records of Cap. and Dimension
TK-205	N	-	-	-	-	-	None
TK-206	N	-	-	-	-	-	None
TK-207	Y	74	<=15	12-01-91	-	Kb	Records of Cap. and Dimension
TK-211	Y	74	<=15	12-01-91	04-27-91	Kb	Records of Cap. and Dimension
TK-213	Y	74	<=15	12-01-91	-	Kb	Records of Cap. and Dimension
TK-215	Y	74	<=15	12-01-91	-	Kb	Records of Cap. and Dimension
TK-217	Y	74	<=15	12-01-90	-	Kb	Records of Cap. and Dimension
TK-218	Y	144	<=15	12-01-90	-	Kb	Records of Cap. and Dimension
TK-220	N	-	-	-	-	-	None
TK-221	Y	74	<=15	12-01-91	-	Kb	Records of Cap. and Dimension
TK222	Y	144	<=15	12-01-90	-	Kb	Records of Cap. and Dimension
TK-223	Y	74	<=15	12-01-91	-	Kb	Records of Cap. and Dimension
TK-224	N	-	-	-	-	-	None
TK-234	Y	146	<=15	01-01-91	-	Kb	Records of Cap. and Dimension
TK-236	N	-	-	-	-	-	None
TK-238	Y	146	<=15	01-01-91	-	Kb	Records of Cap. and Dimension
TK-239	Y	74	<=15	01-01-91	-	Kb	Records of Cap. and Dimension
TK-240	Y	146	<=15	01-01-91	-	Kb	Records of Cap. and Dimension
TK-241	Y	74	<=15	01-01-91	-	Kb	Records of Cap. and Dimension

TK-242	Y	146	<=15	01-01-91	-	Kb	Records of Cap. and Dimension
TK-244	Y	146	<=15	01-01-91	-	Kb	Records of Cap. and Dimension
TK-246	Y	146	<=15	01-01-91	-	Kb	Records of Cap. and Dimension
TK-250	Y	146	<=15	04-01-91	-	Kb	Records of Cap. and Dimension
TK-252	Y	146	<=15	04-01-91	-	Kb	Records of Cap. and Dimension
TK-254	Y	146	<=15	04-01-91	-	Kb	Records of Cap. and Dimension
TK-255	Y	74	<=15	04-01-91	04-27-91	Kb	Records of Cap. and Dimension
TK-99	Y	38	<=15	11-01-90	-	Kb	Exempt

Since the capacity of tank TK-99 is less than the applicable capacity 40 cubic meters, Tank TK-99 is exempt from the requirements of 40 CFR 60, Subpart Kb.

Tanks 205, 206, 220, 224, and 236 do not store volatile organic liquids. Thus, the requirements of Subpart Kb do not apply to these tanks.

Tanks 202, 204, 207, 211, 213, 215, 217, 218, 221, 222, 223, 234, 238, 239, 240, 241, 242, 244, 246, 250, 252, 254, and 255, each store volatile organic liquids, were constructed, reconstructed, or modified after July 23, 1984, have capacities greater than 40 cubic meters, and have true vapor pressures less than or equal to 15 kiloPascals. Therefore, pursuant to 40 CFR 60.110b(b) and (c), these tanks are subject to the requirements of 40 CFR 60.116b(a) and (b).

Operation Condition 5 shall therefore be changed as follows:

5. ~~That the storage tanks shall comply with the New Performance Standard, 326 IAC 12, (40 CFR Part 60.110b-60.117b, Subpart Kb). This rule requires:~~

   ~~(a) that Tank Nos. TK-202, TK-204, TK-218, TK-222, TK-234, TK-238, TK-240, TK-244, TK250, and TK-254 shall determine the maximum vapor pressure of the waste mixes stored, paragraph 116b(f), and~~

   ~~(b) that dimensions of all tanks except Tank No. TK-1 shall be kept in a readily accessible place, paragraph 116b(b).~~

   The owner or operator shall, for Tanks TK-202, TK-204, TK-207, TK-211, TK-213, TK-215, TK-217, TK-218, TK-221, TK-222, TK-223, TK-234, TK-238, TK-239, TK-240, TK-241, TK-242, TK-244, TK-246, TK-250, TK-252, TK-254, and TK-255, keep readily accessible records showing for each storage vessel:

   (a) the respective dimensions, and
   (b) an analysis showing the capacity of each storage vessel.

   Said records shall be kept for the life of the source.

(h) Operation Condition 7:

Operation Condition 7 shall be amended as follows to better clarify the requirements.

7. ~~That:~~ **The** owner or operator shall limit ~~(a)~~ the number of batches produced ~~and the solvent emission rate of each including the the fugitive emissions from the flanges, valves, pumps, etc., and (b) the amount and type of solvent stored in each of the tanks shall be~~ such that **the** VOC emissions from **all equipment included in this permit** ~~the expansion of the pharmaceutical manufacturing facilities shall~~ **do** not exceed 39.6 tons per ~~twelve~~ consecutive month period.

   The cumulative emissions divided by the cumulative months of operation during any month of the first year of operation shall not exceed 3.3 tons per month. This limitation will make these facilities not subject to Prevention of Significant Deterioration (PSD) 326 IAC 2-2.

(i) Control Requirements:

Since Eli Lilly and Company has stated that they wish to control the emissions from the storage tanks with regenerative thermal oxidizers to comply with the overall control efficiency requirements of 40 CFR 63, Subpart GGG (95% overall), a new condition (Condition 8) shall be added requiring that all applicable tanks specified in this registration be controlled via regenerative thermal oxidation, that the thermal oxidizers shall be operated at all times the tanks are storing volatile organic compounds, and that the thermal oxidizers are operated at the parameters that achieve the desired overall control efficiency of 95%.

8. The owner or operator shall control the volatile organic compound (VOC) emissions from Tanks TK-202, TK-204, TK-207, TK-211, TK-213, TK-215, TK-217, TK-218, TK-221, TK-222, TK-223, TK-234, TK-238, TK-239, TK-240, TK-241, TK-242, TK-244, TK-246, TK-250, TK-252, TK-254, and TK-255, utilizing existing regenerative thermal oxidizers XXXX.

Said thermal oxidizers shall be operated at all times VOC emissions are being exhausted from the tanks, with the thermal oxidizers being operated at the parameters, established in the most recent compliance stack test(s), that achieve at a minimum, an overall control efficiency of 95%.

(j) Testing Requirements:

Since no tests of the existing thermal oxidizers have been conducted, a new condition (Condition 9) shall be added to establish the thermal oxidizer operating parameters that achieve the desired 95% overall control efficiency.

9. Within 90 days of issuance of amendment No. 165-14531-00009, the owner or operator shall perform volatile organic conpound (VOC) testing of thermal oxidizers XXXX to establish the operating parameters that achieve an overall control efficiency of 95%. Said testing shall be conducted utilizing methods approved by the Commissioner.

In addition, the Office of Air Quality (OAQ) shall be notified of the test date at least two (2) weeks prior to the date, a test protocol shall be submitted to the OAQ 35 days in advance of the test, and all test reports must be received by the OAQ within 45 days of completion of the testing.

(k) Renumbering of Existing Condition 8:

Existing Condition 8 shall be renumbered as Condition 10.

Operation Condition 8 (now Operation Condition 10) specifies the record keeping and reporting requirements associated with the leak repair requirements of Condition 6, and the VOC emission limit of Condition 7.

This condition shall be updated to include more current terms and separate the record keeping and reporting requirements associated with conditions 6 and 7 into this condition and new condition 11.

Operation Condition 10 shall include the following record keeping requirements.

10. The~~at~~ **owner or operator shall keep and maintain** a log of information necessary to document compliance with **Operation** Condition No~~s~~. 6 ~~and 7 shall be maintained~~. These records shall include**:**

(~~c~~**a**) the number of flanges, valves, and pumps**, etc.** checked, **and**
(b) for all leaks detected,

(1) What part(s) was(were) leaking,
(2) the date the leak(s) was(were) detected,
(3) the leak definition and the percent leak~~ing~~**age** ~~for each category~~,
(4) ~~(d)~~ the leak rate**(s)**,
(5) ~~(e)~~ the type of repair**(s)** made, and
(6) ~~(f)~~ the date**(s)** of the repair**(s),**

with said ~~These~~ records ~~shall~~ be**ing** kept for at least the past 24 month period and made available upon request of the Office of Air ~~Management~~ **Quality**.

New Operation Condition 11 shall be added as follows:

11. The **owner or operator shall keep and maintain** a log of information necessary to document compliance with **Operation** Condition No~~s~~ 7. These records shall include**:**

(a) ~~the number of batches produced and~~ **for the process equipment,** the ~~solvent~~ **VOC** emission**s generated during each batch run,** ~~rate of each including the fugitive emissions from the flanges, valves, pumps, etc.~~,

(b) **for each storage tank:**

(1) the amount of liquid stored,
(2) the type of ~~solvent~~ **liquid** stored**, and**
(3) the estimated VOC emissions ~~in each of the tanks~~,

(c) for the flanges, valves, pumps, etc., the estimated VOC emissions, and

(d) for all of the equipment listed in (a), (b), and (c), the total monthly VOC emissions,

with said~~These~~ records ~~shall~~ be**ing** kept for at least the past 24 month period and made

available upon request of the Office of Air **Quality**.

To perform the ~~E~~**e**mission calculations**, the owner or operator shall use the following as applicable** ~~shall be based on~~**:**

(~~1~~**a**) "Control Technique Guidelines for Synthetic Pharmaceutical Manufacturing" - EPA Document 450/2-78-029, December 1978,
(~~2~~**b**) EPA Compilation of Air Pollutant Emission Factors, AP-42, Chapter 4.3 for Storage of Organic Solvents, and
(~~3~~**c**) the EPA rule making proposed guideline emission factors for fugitive emissions from pumps valves and flanges sited in Lilly's Leak Detection and repair program letter of May 23, 1990.

In addition, the owner or operator shall submit a ~~A~~quarterly summary ~~shall be submitted~~ to:

~~Enforcement Section~~
~~Office of Air Management~~
~~Department of Environmental Management~~
~~P.O. Box 6015~~
~~Indianapolis, Indiana 46206~~

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within 30 days after the end of the quarter being reported in the format attached.

(l) Permit Unit Description:

The unit description of the permit shall be amended to specify the new controls that will be used.

C64	Storage Tanks Nos. TK-202, TK-204 to TK-207, TK-211, TK-213, TK-215, TK-217, TK-218, TK-220 to TK-224, TK-234, TK-236, TK-238 to TK-242, TK-244, TK-246, TK-250, TK-252, TK-254, TK-255**,** and TK-~~JKL~~**99**	~~Vent Condensers~~ **Regenerative Thermal Oxidizer**
C96	Storage Tank No. TK-1	Scrubber
C63	TK-207 and TK-209	Regenerative Thermal Oxidizer

2. Construction Permit 165-3801:

This permit was for construction and operation of tank modules F and G of the solvent recovery operations. The permit requires that VOC emissions from the tanks be controlled by cryogenic vent condenser with a control efficiency of 95% or more. At the time of permitting, it was anticipated that the maximum true vapor of the liquids being stored in many of the tanks would trigger the control requirements of 40 CFR 60, Subpart Kb. However, the tanks listed in this permit have never had true vapor pressures greater than the applicable levels that require controls. Thus, the Subpart Kb control requirements should be removed. Even though they are not required pursuant to 40 CFR 60, Subpart Kb, the vent condensers are required to prevent the applicability of PSD.

Routing the tank emissions to the regenerative thermal oxidizers (RTOs) will satisfy the requirement to use a control device with a control efficiency of 95% or greater and will prevent the modificatio from being a major modification. Therefore, the language in the permit, which requires the use of vent condenser should be amended to allow the use of the RTOs as alternative control devices. In addition, language in this permit should be revised to clarify that the requirements of 40 CFR 60.112b through 115b do not apply.

The following is a description of the permit review conducted and the changes that will be made.

(a) 326 IAC 8-4-3 Applicability:

326 IAC 8-4-3 does not apply to any of the tanks because the worst case capacity of any of the tanks 146 m^3 (38,570 gallons) is less than the applicable level of 39,000 gallons.

(b) 326 IAC 8-5-3 Applicability:

326 IAC 8-5-3 applies to the tanks because the tanks store VOCs, are listed applicable facilities, and Bryan Sheets of Eli Lilly and Company stated in a phone conversation, that since there was no means of determining the potential to emit of all the equipment listed in this permit, that the potential to emit can be assumed to be greater than the applicable level of 15 pounds per day.

There are no 326 IAC 8-5-3 requirements in the permit. To incorporate the new requirements, new Operation Condition 6 shall be added to the permit..

The following is an analysis of 326 IAC 8-5-3 and the resultant changes to the existing registration condition.

(1) The control requirements of 326 IAC 8-5-3(b)(1) apply to all reactors, distillation operations, crystallizers, centrifuges, and vacuum dryers, not the storage tanks, transfer equipment, extraction equipment, and filters.

The requirements of 326 IAC 8-5-3(b)(1) do not apply in this case because the units in this permit are storage tanks.

(2) The requirements of 326 IAC 8-5-3(b)(2) apply to all air dryers and production equipment exhaust sources existing as of July 1, 1990, in Clark, Elkhart, Floyd, Lake, Marion, Porter, and St. Joseph counties and at new sources located in any county construction of which commences after July 1, 1990.

The requirements of 326 IAC 8-5-3(b)(2) do not apply in this case because the sourfe is not located in Clark, Elkhart, Floyd, Lake, Marion, Porter, or St. Joseph counties and the source

was existing on July 1, 1990.

(3) The requirements of 326 IAC 8-5-3(b)(3) apply to the storage tanks listed in this registration because 326 IAC 8-5-3(b)(3) applies specifically to storage tanks.

(4) Although the requirements of 326 IAC 8-5-3(b)(4) apply to all reactors, distillation operations, crystallizers, centrifuges, and vacuum dryers, storage tanks, transfer equipment, extraction equipment, and filters, the requirements of 326 IAC 8-5-3(b)(4) will not be included in the registration because these requirements apply specifically to centrifuges, rotary vacuum filters, and other filters having an exposed liquid surface, where the liquid contains VOC and exerts a total VOC vapor pressure of three and five-tenths (3.5) kiloPascals (five-tenths (0.5) pounds per square inch) or more t twenty degrees Celsius (20^{o} C), not storage tanks.

(5) Although the requirements of 326 IAC 8-5-3(b)(5) apply to all reactors, distillation operations, crystallizers, centrifuges, and vacuum dryers, storage tanks, transfer equipment, extraction equipment, and filters, the requirements of 326 IAC 8-5-3(b)(5) will not be included in the registration because the requirements apply specifically to inprocess tanks containing a VOC at any time. The tanks listed in the registration are not inprocess tanks.

(6) The requirements of 326 IAC 8-5-3(b)(6) apply to the storage tanks listed in this registration because 326 IAC 8-5-3(b)(6) applies to all reactors, distillation operations, crystallizers, centrifuges, and vacuum dryers, all storage tanks, transfer equipment, extraction equipment, and filters.

Based on this analysis, the condition containing the 326 IAC 8-5-3 requirements shall be changed as follows:

6. Pursuant to 326 IAC 8-5-3 ~~volatile organic compound emissions from Tank Nos. TK-174, TK-176, and TK-178 shall be controlled by condensers. (Copy enclosed)~~**, the owner or operator shall, for Tanks TK-203, TK-209, TK-216, TK-219, TK-229, TK-230, TK-231, TK-232, TK-233, TK-235, TK-237, TK-243, TK-245, TK-247, and TK-248 :**

(a) provide a vapor balance system or equivalent control that is at least ninety percent (90%) effective in reducing emissions from truck or railcar deliveries to storage tanks with capacities greater than seven thousand five hundred (7,500) liters (two thousand (2,000) gallons) that store VOC with vapor pressures greater than twenty-eight (28) kiloPascals (four and one-tenth (4.1) pounds per square inch) at twenty degrees Celsius (20°C),

(b) install pressure/vacuum conservation vents set at plus or minus two-tenths (+-0.2) kilo Pascals on all storage tanks that store VOC with vapor pressures greater than ten (10) kiloPascals (one and five-tenths (1.5) pounds per square inch at twenty degrees Celsius (20°C)), unless a more effective control system is used, and

(c) repair all leaks from which a liquid, containing VOC, can be observed running or dripping. The repair shall be completed the first time the equipment is off line for a period of time long enough to complete the repair.

(c) 326 IAC 8-9:

326 IAC 8-9 does not apply to any of the tanks because the source is not located in any of the applicable counties (Clark, Floyd, Lake, and Porter).

(d) 326 IAC 8-1-6:

326 IAC 8-1-6 does not apply to any of the tanks because 326 IAC 8-5-3 applies to the applicable units.

(e) 40 CFR 60, Subpart K:

40 CFR 60, Subpart K does not apply to any of the tanks because none of the tanks were constructed prior to May 19, 1978.

(f) 40 CFR 60, Subpart Ka:

40 CFR 60, Subpart Ka does not apply to any of the tanks because all of the tanks were constructed after the latest applicable date of July 23, 1984.

(g) 40 CFR 60, Subpart Kb:

Operation Condition 5 establishes the requirements for New Source Performance Standard (NSPS), Subpart Kb. The following is an analysis of the rule to determine if any errors in applicability were made:

The following is a listing of the parameters and the associated applicable Kb requirements for the storage tanks.

Tank	VOL ?	Capacity (m3)	TVP (kPa)	Const. Date	Mod. Date	Rule	Requirements
TK-201	N	-	-	-	11-17-94	-	None
TK-203	Y	74	<=15	12-01-91	02-02-98 11-17-94	Kb	Records of Cap. and Dimension
TK-208	N	-	-	-	11-17-94	-	None
TK209	Y	74	<=15	12-01-91	-	Kb	Records of Cap. And Dimension
TK-210	N	-	-	-	11-17-94	-	None
TK-212	N	-	-	-	11-17-94	-	None
TK-214	N	-	-	-	11-17-94	-	None
TK-216	Y	144	<=15	12-01-90	11-17-94	Kb	Records of Cap. and Dimension
TK-219	Y	74	<=15	12-01-91	11-17-94	Kb	Records of Cap. and Dimension
TK-225	N	-	-	-	11-17-94	-	None
TK-226	N	-	-	-	11-17-94	-	None
TK-227	N	-	-	-	11-17-94	-	None
TK-228	N	-	-	-	11-17-94	-	None

TK-229	Y	74	<=15	01-01-91	11-17-94	Kb	Records of Cap. and Dimension
TK-230	Y	146	<=15	01-01-91	11-17-94	Kb	Records of Cap. and Dimension
TK-231	Y	74	<=15	01-01-91	11-17-94	Kb	Records of Cap. and Dimension
TK-232	Y	146	<=15	01-01-91	11-17-94	Kb	Records of Cap. and Dimension
TK-233	Y	74	<=15	01-01-91	11-17-94	Kb	Records of Cap. and Dimension
TK-235	Y	74	<=15	01-01-91	11-17-94	Kb	Records of Cap. and Dimension
TK-237	Y	74	<=15	01-01-91	11-17-94	Kb	Records of Cap. and Dimension
TK-243	Y	74	<=15	01-01-91	11-17-94	Kb	Records of Cap. and Dimension
TK-245	Y	74	<=15	01-01-91	11-17-94	Kb	Records of Cap. and Dimension
TK-247	Y	74	<=15	01-01-91	11-17-94	Kb	Records of Cap. and Dimension
TK-248	Y	146	<=15	01-01-91	11-17-94	Kb	Records of Cap. and Dimension

Tanks 201, 208, 210, 212, 214, 225, 226, 227, and 228 do not store volatile organic liquids. Thus, the requirements of Subpart Kb do not apply to these tanks.

Tanks 203, 209, 216, 219, 229, 230, 231, 232, 233, 235, 237, 243, 245, 247, and 248, each store volatile organic liquids, were constructed, reconstructed, or modified after July 23, 1984, have capacities greater than 40 cubic meters, and have true vapor pressures less than or equal to 15 kiloPascals. Therefore, pursuant to 40 CFR 60.110b(b) and (c), these tanks are subject to the requirements of 40 CFR 60.116b(a) and (b).

Operation Condition 4 shall therefore be changed as follows:

4. The owner or operator shall, for Tanks TK-203, TK-209, TK-216, TK-219, TK-229, TK-230, TK-231, TK-232, TK-233, TK-235, TK-237, TK-243, TK-245, TK-247, and TK-248, keep readily accessible records showing for each storage vessel:

(a) the respective dimensions, and
(b) an analysis showing the capacity of each storage vessel.

Said records shall be kept for the life of the source.

(h) Operation Condition 5:

Operation Condition 5 specifies the vent condenser operating requirements. Since the emissions will be controlled by regenerative thermal oxidizers, these requirements shall be amended to require the regenerative thermal oxidizer(s) be operated at the parameters established in the most recent compliance stack test(s), to achieve the overall control efficiency required of the condensers of CP 165-3801 (95%).

~~That the vent condensers control system shall be set to maintain a minimum coolant flow rate of 10,000 pounds per hour of Syltherm per condenser and a minimum coolant inlet temperature of -40°C.~~

5. The owner or operator shall control the volatile organic compound (VOC) emissions from Tanks TK-203, TK-209, TK-216, TK-219, TK-229, TK-230, TK-231, TK-232, TK-233, TK-235, TK-237, TK-243, TK-245, TK-247, and TK-248, utilizing existing regenerative thermal oxidizers XXXX. Said thermal oxidizers shall be operated at the parameters, established in the most recent compliance stack test(s), that achieve at a minimum, an overall control efficiency of 95%.

(i) Operation Condition 6:

Operation Condition 6 includes 40 CFR 60, Subpart Kb requirements that do not apply to any of the tanks because the true vapor pressures of all tanks are less than or equal to the applicable pressure of 15 kiloPascals. Thus, the requirements of Operation Condition 6 shall be removed.

~~6. That pursuant to 326 IAC 12 and 40 CFR 60.115b(c)(1), the owner or operator shall keep the following records pertaining to tank nos. TKS-208, 210, 212, 214, 216, 226, 228, 230, 232, and 248.~~

~~(a) A copy of the operating plan as describe in 40 CFR 60.113b(c).~~

~~(b) A record of the measured values of the gas outlet temperature, coolant (Syltherm) flow rate and coolant inlet temperature to be monitored to ensure that the control device shall be operated to maintain at least 95% VOC control efficiency.~~

(j) Operation Condition 7:

Operation Condition 7 includes 40 CFR 60, Subpart Kb requirements that do not apply to any of the tanks because the true vapor pressures of all tanks are less than or equal to the applicable pressure of 15 kiloPascals. Thus, the requirements of Operation Condition 7 shall be removed.

~~7. That pursuant to 326 IAC 12 and 40 CFR 60.116b(f)(1), prior to initial filling the owner or operator shall determine the maximum true vapor pressure for the range of anticipated liquid compositions to be stored in the tank nos. TKS-208, 210, 212, 214, 216, 226, 228, 230, 232, and 248, using the methods described in 40 CFR 60.116b(e).~~

(k) Operation Condition 8:

Operation Condition 8 includes 40 CFR 60, Subpart Kb requirements that do not apply to any of the tanks because the true vapor pressures of all tanks are less than or equal to the applicable pressure of 15 kiloPascals. Thus, the requirements of Operation Condition 8 shall be removed.

~~8. That pursuant to 326 IAC 12 and 40 CFR 60.116b(f)(2), if the vapor pressure of the liquid composition in the tank nos. TKS-208, 210, 212, 214, 216, 226, 228, 230, 232, and 248 are determined to have a maximum vapor pressure between 15 and 27.6 kPa (2. To 4.1 psi), then the owner or operator shall test the vapor pressure once every six months after the initial physical test of vapor pressure. The vapor pressure will be measured by an appropriate method as approved by the Commissioner.~~

(l) Operation Condition 9:

Operation Condition 9 specifies the notification requirements required under 40 CFR 60.7.

These conditions shall be removed because they do not apply.

~~9. That pursuant to 326 IAC 12 and 40 CFR 60.7, the owner or operator shall furnish the Office of Air Management written notification as follows:~~

~~(a) A notification of the actual date of initial startup of tank Nos. TKS-208, 210, 212, 214. 216, 226, 228, 230, 232, 248 postmarked within 15 days after such date.~~

~~(b) A records of the occurrence and duration of any startup, shutdown, or malfunction i the operation of the tank Nos. TKS-208, 210, 212, 214, 216, 226, 228, 230, 232, and 248; and any malfunction of the vent condensers controlling these tanks.~~

(m) Operation Condition 10:

Existing Operation Condition 10 requires the source to maintain records that document compliance with the requirements of existing conditions 6, 7, 8, and 9, that these records be kept for at least the past 24 month period and made available upon request of the Office of Air Quality, with the required data being submitted to the Compliance Data Section.

Since existing conditions 6, 7, 8, and 9 have been removed, and 6 added, Operation Condition 10 shall be renumbered Operation Condition 7, and the references to 6, 7, 8, and 9 removed

7. That a log of information necessary to document compliance with condition no~~s. 6, 7, 8, and~~ 9 shall be maintained. These records shall be kept for at least the past 24 month period and made available upon request to the Office of Air ~~Management~~ **Quality**. The data required in the above conditions shall be submitted to:

~~Department of Environmental Management~~
~~Office of Air Management~~
~~Compliance Data Section~~
~~100 North Senate Avenue~~
~~P.O. Box 6015~~
~~Indianapolis, Indiana 46206-6015~~

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(xi) Operation Condition 11:

Operation Condition 11 shall be renumbered Operation Condition 9.

4. Within 90 days of issuance of amendment No. 165-14531-00009, the owner or operator shall perform volatile organic conpound (VOC) testing of thermal oxidizers XXXX to establish the operating parameters that achieve an overall control efficiency of 95%. Said testing shall be conducted utilizing methods approved by the Commissioner.

In addition, the Office of Air Quality (OAQ) shall be notified of the test date at least two (2) weeks prior to the date, a test protocol shall be submitted to the OAQ 35 days in advance of the test, and all test reports must be received by the OAQ within 45 days of

completion of the testing.

(d) Page 5 of 5:

(xii) Operation Condition (xii):

Operation Condition 12 requires Lilly to have a leak detection and repair procedure as implemented on June 10, 1992.

No changes to this condition are necessary.

(a) Page 1 of 5:

The unit description shall be amended as follows to reflect the new controls that will be used.

.....~~Potential emissions of~~ **The** volatile organic compound~~s~~ **emissions** from the tanks will be controlled by ~~cryogenic condensers~~ **regenerative thermal oxidizers** ~~with VOC control efficiency of 95% or more~~.

(v)

(vi)

3. Proposed Changes to Construction Permit 165-9135:

Construction permit 165-9135-00009 was issued on February 2, 1998. This permit was issued for adding three new processes to the operations at Clinton Labs. Several of the tanks in the solvent recovery tank modules were included in this permit. The permit requires that VOC emissions from all of the process equipment be controlled by existing regenerative thermal oxidizers while the storage tanks be controlled by vent condenser in order to limit the VOC emissions to less than 40 tons per year.

Eli Lilly requests that the permit be amended to state the RTOs as an acceptable control device for the storage tanks.

The following is a description of the permit review conducted and the changes that will be made.

Page 6 of 17:

Paragraph (e) of the Unit Description:

The solvent storage tanks descriptions of paragraph (e) shall be revised to state that the VOC emissions will be controlled by regenerative thermal oxidizers instead of vent condensers.

(e) Solvent Storage:

(1) one (1) solvent storage tank (C64BTK163), nominal capacity of 19,494 gallons, controlled by a ~~vent condenser~~ **regenerative thermal oxidizer**;

(2) one (1) solvent storage tank (C64BTK165), nominal capacity of 19,494 gallons, controlled by a ~~vent condenser~~ **regenerative thermal oxidizer**;

(3) one (1) solvent storage tank (C64BTK167), nominal capacity of 19,494 gallons, controlled by a ~~vent condenser~~ **regenerative thermal oxidizer**;

(4) one (1) solvent storage tank (C64BTK169), nominal capacity of 19,494 gallons, controlled by a ~~vent condenser~~ **regenerative thermal oxidizer**;

(5) one (1) solvent storage tank (C64BTK158), nominal capacity of 38,551 gallons, controlled by a ~~vent condenser~~ **regenerative thermal oxidizer**;

(6) one (1) solvent storage tank (C64BTK160), nominal capacity of 38,551 gallons, controlled by a ~~vent condenser~~ **regenerative thermal oxidizer**;

(7) one (1) solvent storage tank (C64BTK162), nominal capacity of 38,551 gallons, controlled by a ~~vent condenser~~ **regenerative thermal oxidizer**;

(8) one (1) solvent storage tank (C64BTK164), nominal capacity of 38,551 gallons, controlled by a ~~vent condenser~~ **regenerative thermal oxidizer**;

(9) one (1) solvent storage tank (C64BTK174), nominal capacity of 19,494 gallons, controlled by a ~~vent condenser~~ **regenerative thermal oxidizer**;

(10) one (1) solvent storage tank (C64BTK203), nominal capacity of 19,494 gallons, controlled by a ~~vent condenser~~ **regenerative thermal oxidizer**;

(11) one (1) solvent storage tank (C64BTK255), nominal capacity of 19,494 gallons, controlled by a regenerative thermal oxidizer.

4. Proposed Changes to the Registration Issued on 10/11/90:

This permit was issued for replacing several underground storage tanks with new above ground storage tanks in the solvent recovery operations. The registration states that vent condensers are required some of the tanks pursuant to 326 IAC 8-5-3. The vent condenser requirements specified in 326 IAC 8-5-3(b)(1) do not apply to the storage tanks. Therefore, these requirements should be removed from the registration.

In addition, the registration states that some of the vent condensers must meet a minimum control efficiency of 95% pursuant to 40 CFR 60, Subpart Kb. These tanks are not subject to the control device requirements of Subpart Kb because the respective capacities and true vapor pressures are less than the applicable levels. Therefore, this requirement should also be removed from the registration.

The following is a description of the permit review conducted and the changes that will be made.

(a) 326 IAC 8-4-3 Applicability:

326 IAC 8-4-3 does not apply to any of the tanks because the worst case capacity of any of the tanks 146 m^3 (38,570 gallons) is less than the applicable level of 39,000 gallons.

(b) 326 IAC 8-5-3 Applicability:

The registration has a condition pertaining to the requirements of 326 IAC 8-5-3.

326 IAC 8-5-3 applies to the tanks because the tanks store VOCs, are listed applicable facilities, and Bryan Sheets of Eli Lilly and Company stated in a phone conversation, that since there was no means of determining the potential to emit of all the equipment listed in this permit, that the potential to emit can be assumed to be greater than the applicable level of 15 pounds per day.

However, Eli Lilly and Company has also stated that the 326 IAC 8-5-3 requirements specified in the registration are incorrect.

The following is an analysis of 326 IAC 8-5-3 and the resultant changes to the existing registration condition.

(1) The control requirements of 326 IAC 8-5-3(b)(1) apply to all reactors, distillation operations, crystallizers, centrifuges, and vacuum dryers, not the storage tanks, transfer equipment, extraction equipment, and filters.

The requirements of 326 IAC 8-5-3(b)(1) do not apply in this case because the units registered in this permit are storage tanks.

(2) The requirements of 326 IAC 8-5-3(b)(2) apply to all air dryers and production equipment exhaust sources existing as of July 1, 1990, in Clark, Elkhart, Floyd, Lake, Marion, Porter, and St. Joseph counties and at new sources located in any county construction of which commences after July 1, 1990.

The requirements of 326 IAC 8-5-3(b)(2) do not apply in this case because the sourfe is not located in Clark, Elkhart, Floyd, Lake, Marion, Porter, or St. Joseph counties and the source

was existing on July 1, 1990.

(3) The requirements of 326 IAC 8-5-3(b)(3) apply to the storage tanks listed in this registration because 326 IAC 8-5-3(b)(3) applies specifically to storage tanks.

(4) Although the requirements of 326 IAC 8-5-3(b)(4) apply to all reactors, distillation operations, crystallizers, centrifuges, and vacuum dryers, storage tanks, transfer equipment, extraction equipment, and filters, the requirements of 326 IAC 8-5-3(b)(4) will not be included in the registration because these requirements apply specifically to centrifuges, rotary vacuum filters, and other filters having an exposed liquid surface, where the liquid contains VOC and exerts a total VOC vapor pressure of three and five-tenths (3.5) kiloPascals (five-tenths (0.5) pounds per square inch) or more t twenty degrees Celsius (20^{o} C), not storage tanks.

(5) Although the requirements of 326 IAC 8-5-3(b)(5) apply to all reactors, distillation operations, crystallizers, centrifuges, and vacuum dryers, storage tanks, transfer equipment, extraction equipment, and filters, the requirements of 326 IAC 8-5-3(b)(5) will not be included in the registration because the requirements apply specifically to inprocess tanks containing a VOC at any time. The tanks listed in the registration are not inprocess tanks.

(6) The requirements of 326 IAC 8-5-3(b)(6) apply to the storage tanks listed in this registration because 326 IAC 8-5-3(b)(6) applies to all reactors, distillation operations, crystallizers, centrifuges, and vacuum dryers, all storage tanks, transfer equipment, extraction equipment, and filters.

Based on this analysis, the condition containing the 326 IAC 8-5-3 requirements shall be changed as follows:

7. Pursuant to 326 IAC 8-5-3 ~~volatile organic compound emissions from Tank Nos. TK-174, TK-176, and TK-178 shall be controlled by condensers. (Copy enclosed)~~**, the owner or operator shall, for Tanks TK-161, TK-167, TK-171, TK-173, TK-158, TK-160, TK-162, TK-164, TK-166, TK-168, TK-172, TK-174, TK-176, and TK-178:**

(a) provide a vapor balance system or equivalent control that is at least ninety percent (90%) effective in reducing emissions from truck or railcar deliveries to storage tanks with capacities greater than seven thousand five hundred (7,500) liters (two thousand (2,000) gallons) that store VOC with vapor pressures greater than twenty-eight (28) kiloPascals (four and one-tenth (4.1) pounds per square inch) at twenty degrees Celsius (20°C),

(b) install pressure/vacuum conservation vents set at plus or minus two-tenths (+-0.2) kilo Pascals on all storage tanks that store VOC with vapor pressures greater than ten (10) kiloPascals (one and five-tenths (1.5) pounds per square inch at twenty degrees Celsius (20°C)), unless a more effective control system is used, and

(c) repair all leaks from which a liquid, containing VOC, can be observed running or dripping. The repair shall be completed the first time the equipment is off line for a period of time long enough to complete the repair.

This condition was not numbered in the registration. This Condition has therefore been

designated as Condition 1.

(c) 326 IAC 8-9:

326 IAC 8-9 does not apply to any of the tanks because the source is not located in any of the applicable counties (Clark, Floyd, Lake, and Porter).

(d) 326 IAC 8-1-6:

326 IAC 8-1-6 does not apply to any of the tanks because 326 IAC 8-5-3 applies to the storage tanks.

(e) 40 CFR 60, Subpart K:

40 CFR 60, Subpart K does not apply to any of the tanks because none of the tanks were constructed prior to May 19, 1978.

(f) 40 CFR 60, Subpart Ka:

40 CFR 60, Subpart Ka does not apply to any of the tanks because all of the tanks were constructed after applicable date of July 23, 1984.

(g) 40 CFR 60, Subpart Kb:

The registration has a condition that specifies the storage tank requirements of 40 CFR 60, Subpart Kb. The following is a list of the results of the Subpart Kb applicability determination.

Tank	VOL ?	Capacity (m3)	TVP (kPa)	Const. Date	Mod. Date	Rule	Requirements
TK-161	Y	74	<=15	11-01-90	-	Kb	Records of Cap. and Dimension
TK-167	Y	74	<= 15	11-01-90	02-02-98	Kb	Records of Cap. and Dimension
TK-171	Y	74	<=15	11-01-90	-	Kb	Records of Cap. and Dimension
TK-173	Y	74	<=15	11-01-90	-	Kb	Records of Cap. and Dimension
TK-158	Y	146	<=15	09-01-89	02-02-98	Kb	Records of Cap. and Dimension
TK-160	Y	146	<=15	09-01-89	02-02-98	Kb	Records of Cap. and Dimension
TK-162	Y	146	<=15	09-01-89	02-02-98	Kb	Records of Cap. and Dimension
TK-164	Y	146	<=15	09-01-89	02-02-98	Kb	Records of Cap. and Dimension
TK-166	Y	146	<=15	09-01-89	-	Kb	Records of Cap. and Dimension
TK-168	Y	146	<=15	09-01-89	-	Kb	Records of Cap. and Dimension
TK-172	Y	145	<=15	09-01-89	-	Kb	Records of Cap. and Dimension
TK-174	Y	145	<=15	09-01-89	02-02-98	Kb	Records of Cap. and Dimension
TK-176	Y	145	<=15	09-01-89	-	Kb	Records of Cap. and Dimension
TK-178	Y	145	<=15	09-01-89	-	Kb	Records of Cap. and Dimension

Tanks TK-161, TK-167, TK-171, TK-173, TK-158, TK-160, TK-162, TK-164, TK-166, TK-168, TK-172, TK-174, TK-176, and TK-178, each store volatile organic liquids, were constructed, reconstructed, or modified after July 23, 1984, have capacities greater than 40 cubic meters, and have true vapor pressures less than or equal to 15 kiloPascals. Therefore, pursuant to 40 CFR 60.110b(b) and (c), these tanks are subject to the requirements of 40 CFR 60.116b(a) and (b).

To incorporate these requirements, the existing registration shall be amended as follows.

~~Pursuant to 326 IAC 12 (40 CFR Part 60.110b-60.117b, Subpart Kb)~~

~~(1) Tank Nos. TK-172, TK-176, and TK-178 shall require condensers with a minimum control efficiency of 95%,~~

~~(2) Tank Nos. TK-168, TK-172, TK-176, and TK-178 shall record all VOC's stored, and the duration and vapor pressure of each VOC stored,~~

~~(3) Tank Nos. TK-158, TK-160, TK-162, TK-164, TK-166, TK-168, and TK-174 shall report when any VOCs with a vapor pressure greater than 4 psi is stored in any of these tanks, and~~

~~(4) The dimensions of all fourteen tanks shall be kept in a readily acceptable place.~~

2. The owner or operator shall, for Tanks TK-161, TK-167, TK-171, TK-173, TK-158, TK-160, TK-162, TK-164, TK-166, TK-168, TK-172, TK-174, TK-176, and TK-178, keep readily accessible records showing for each storage vessel:

(a) the respective dimensions, and
(b) an analysis showing the capacity of each storage vessel.

Said records shall be kept for the life of the source.

(h) Control Requirements:

Since Eli Lilly and Company has stated that they wish to control the emissions from the storage tanks with regenerative thermal oxidizers to comply with the overall control efficiency requirements of 40 CFR 63, Subpart GGG (95% overall), a new condition (Condition 3) shall be added requiring that all applicable tanks specified in this registration be controlled via regenerative thermal oxidation, that the thermal oxidizers shall be operated at all times the tanks are storing volatile organic compounds, and that the thermal oxidizers are operated at the parameters that achieve the desired overall control efficiency of 95%.

3. The owner or operator shall control the volatile organic compound (VOC) emissions from Tanks TK-161, TK-167, TK-171, TK-173, TK-158, TK-160, TK-162, TK-164, TK-166, TK-168, TK-172, TK-174, TK-176, and TK-178, utilizing existing regenerative thermal oxidizers XXXX.

Said thermal oxidizers shall be operated at all times VOC emissions are being exhausted from the tanks, with the thermal oxidizers being operated at the parameters, established in the most recent compliance stack test(s), that achieve at a minimum, an overall control efficiency of 95%.

(i) Testing Requirements:

Since no tests of the existing thermal oxidizers have been conducted, a new condition (Condition 4) shall be added to establish the thermal oxidizer operating parameters that achieve the desired 95% overall control efficiency.

4. Within 90 days of issuance of amendment No. 165-14531-00009, the owner or operator shall perform volatile organic conpound (VOC) testing of thermal oxidizers XXXX to establish the operating parameters that achieve an overall control efficiency of 95%. Said testing shall be conducted utilizing methods approved by the Commissioner.

In addition, the Office of Air Quality (OAQ) shall be notified of the test date at least two (2) weeks prior to the date, a test protocol shall be submitted to the OAQ 35 days in advance of the test, and all test reports must be received by the OAQ within 45 days of completion of the testing.

5. Registration 165-2031-00009:

This permit was issued ro allow the replacement of several underground storage tanks with ne w above ground storage tanks in the solvent recovery operations. The registration states that some of the vent condensers must meet a minimum control efficiency of 95% pursuant to 40 CFR 60, Subpart Kb. None of the tanks listed in this registration have true vapor pressures or capacities that exceed the applicable levels. Therefore, this requirement should be removed from the registration.

The following is a description of the permit review conducted and the changes that will be made.

(a) 326 IAC 8-4-3 Applicability:

326 IAC 8-4-3 does not apply to any of the tanks because the worst case capacity of any of the tanks 146 m^3 (38,570 gallons) is less than the applicable level of 39,000 gallons.

(b) 326 IAC 8-5-3 Applicability:

Condition 1 of this permit lists the requirements of 326 IAC 8-5-3.

326 IAC 8-5-3 applies to the listed tanks because these tanks store VOCs, are listed applicable facilities, and Bryan Sheets of Eli Lilly and Company stated in a phone conversation, that since there was no means of determining the potential to emit of all the equipment listed in this permit, that the potential to emit can be assumed to be greater than the applicable level of 15 pounds per day.

The following is an analysis of 326 IAC 8-5-3 and the resultant condition that will be incorporated into the registration.

(1) The control requirements of 326 IAC 8-5-3(b)(1) apply to all reactors, distillation operations, crystallizers, centifuges, and vacuum dryers, not the storage tanks, transfer equipment, extraction equipment, and other filters.

The requirements of 326 IAC 8-5-3(b)(1) do not apply in this case because the units registered in this permit are storage tanks.

(2) The requirements of 326 IAC 8-5-3(b)(2) apply to all air dryers and production equipment

exhaust sources existing as of July 1, 1990, in Clark, Elkhart, Floyd, Lake, Marion, Porter, and St. Joseph counties and at new sources located in any county construction of which commences after July 1, 1990.

The requirements of 326 IAC 8-5-3(b)(2) do not apply in this case because the source is not located in Clark, Elkhart, Floyd, Lake, Marion, Porter, or St. Joseph counties and the source was existing on July 1, 1990.

(3) The requirements of 326 IAC 8-5-3(b)(3) apply to the storage tanks listed in this registration because 326 IAC 8-5-3(b)(3) applies specifically to storage tanks.

(4) Although the requirements of 326 IAC 8-5-3(b)(4) apply to all reactors, distillation operations, crystallizers, centrifuges, vacuum dryers, storage tanks, transfer equipment, extraction equipment, and filters, the requirements of 326 IAC 8-5-3(b)(4) will not be included in the registration because these requirements apply specifically to centrifuges, rotary vacuum filters, and other filters having an exposed liquid surface, where the liquid contains VOC and exerts a total VOC vapor pressure of three and five-tenths (3.5) kiloPascals (five-tenths (0.5) pounds per square inch) or more at twenty degrees Celsius (20^{o} C), not storage tanks.

(5) Although the requirements of 326 IAC 8-5-3(b)(5) apply to all reactors, distillation operations, crystallizers, centrifuges, vacuum dryers, storage tanks, transfer equipment, extraction equipment, and filters, the requirements of 326 IAC 8-5-3(b)(5) will not be included in the registration because these requirements apply specifically to inprocess tanks containing a VOC at any time. The tanks listed in the registration are not inprocess tanks.

(6) The requirements of 326 IAC 8-5-3(b)(6) apply to the VOL storage tanks listed in this registration because 326 IAC 8-5-3(b)(6) applies to all reactors, distillation operations, crystallizers, centrifuges, vacuum dryers, all storage tanks, transfer equipment, extraction equipment, and filters.

Based on this analysis, the condition containing the 326 IAC 8-5-3 requirements shall be changed as follows:

1. ~~That~~ Pursuant to 326 IAC 8-5-3 ~~a vapor balance system or equivalent providing at least 90% reduction in VOC emissions from the unloading of solvents to the storage tanks is required for storage tank Nos. TK-210 and TK-226. Since the tank car vapors will vent through the storage tank vent condesnsers, the vent condensers are considered an equivalent control.~~**, the owner or operator shall, for Tanks TK-203, TK-209, TK-216, TK-219, TK-229, TK-230, TK-231, TK-232, TK-233, TK-235, TK-237, TK-243, TK-245, TK-247, and TK-248:**

   (a) provide a vapor balance system or equivalent control that is at least ninety percent (90%) effective in reducing emissions from truck or railcar deliveries to storage tanks with capacities greater than seven thousand five hundred (7,500) liters (two thousand (2,000) gallons) that store VOC with vapor pressures greater than twenty-eight (28) kiloPascals (four and one-tenth (4.1) pounds per square inch) at twenty degrees Celsius (20°C),

   (b) install pressure/vacuum conservation vents set at plus or minus two-tenths (+-0.2) kilo Pascals on all storage tanks that store VOC with vapor pressures greater than ten (10) kiloPascals (one and five-tenths (1.5) pounds per square inch at twenty degrees Celsius (20°C)), unless a more effective control system is used, and

(c) repair all leaks from which a liquid, containing VOC, can be observed running or dripping. The repair shall be completed the first time the equipment is off line for a period of time long enough to complete the repair.

(c) 326 IAC 8-9:

326 IAC 8-9 does not apply to any of the tanks because the source is not located in any of the applicable counties (Clark, Floyd, Lake, and Porter).

(d) 326 IAC 8-1-6:

326 IAC 8-1-6 does not apply to any of the tanks because 326 IAC 8-5-3 applies to the storage tanks.

(e) 40 CFR 60, Subpart K:

40 CFR 60, Subpart K does not apply to any of the tanks because none of the tanks were constructed prior to May 19, 1978.

(f) 40 CFR 60, Subpart Ka:

40 CFR 60, Subpart Ka does not apply to any of the tanks because all of the tanks were constructed after the latest applicable date of July 23, 1984.

(g) 40 CFR 60, Subpart Kb:

Condition 2 of the registration lists the storage tank requirements of 40 CFR 60, Subpart Kb. Eli Lilly has stated that the requirements listed in this condition are incorrect.

The following is a list of the results of the Subpart Kb applicability determination.

Tank	VOL ?	Capacity (m3)	TVP (kPa)	Const. Date	Mod. Date	Rule	Requirements
TK-201	N	-	-	-	11-17-94	-	None
TK-203	Y	74	<=15	12-01-91	02-02-98 11-17-94	Kb	Records of Cap. and Dimension
TK-208	N	-	-	-	11-17-94	-	None
TK209	Y	74	<=15	12-01-91	-	Kb	None
TK-210	N	-	-	-	11-17-94	-	None
TK-212	N	-	-	-	11-17-94	-	None
TK-214	N	-	-	-	11-17-94	-	None
TK-216	Y	144	<=15	12-01-90	11-17-94	Kb	Records of Cap. and Dimension
TK-219	Y	74	<=15	12-01-91	11-17-94	Kb	Records of Cap. and Dimension
TK-225	N	-	-	-	11-17-94	-	None

TK-226	N	-	-	-	11-17-94	-	None
TK-227	N	-	-	-	11-17-94	-	None
TK-228	N	-	-	-	11-17-94	-	None
TK-229	Y	74	<=15	01-01-91	11-17-94	Kb	Records of Cap. and Dimension
TK-230	Y	146	<=15	01-01-91	11-17-94	Kb	Records of Cap. and Dimension
TK-231	Y	74	<=15	01-01-91	11-17-94	Kb	Records of Cap. and Dimension
TK-232	Y	146	<=15	01-01-91	11-17-94	Kb	Records of Cap. and Dimension
TK-233	Y	74	<=15	01-01-91	11-17-94	Kb	Records of Cap. and Dimension
TK-235	Y	74	<=15	01-01-91	11-17-94	Kb	Records of Cap. and Dimension
TK-237	Y	74	<=15	01-01-91	11-17-94	Kb	Records of Cap. and Dimension
TK-243	Y	74	<=15	01-01-91	11-17-94	Kb	Records of Cap. and Dimension
TK-245	Y	74	<=15	01-01-91	11-17-94	Kb	Records of Cap. and Dimension
TK-247	Y	74	<=15	01-01-91	11-17-94	Kb	Records of Cap. and Dimension
TK-248	Y	146	<=15	01-01-91	11-17-94	Kb	Records of Cap. and Dimension

Volatile organic liquids have never been stored in Tanks TK-201, TK-208, TK-210, TK-212, TK-214, TK-225, TK-226, TK-227, and TK-228. Thus 40 CFR 60, Subpart Kb does not apply to these tanks.

Tanks TK-203, TK-209, TK-216, TK-219, TK-229, TK-230, TK-231, TK-232, TK-233, TK-235, TK-237, TK-243, TK-245, TK-247, and TK-248, each store volatile organic liquids, were constructed, reconstructed, or modified after July 23, 1984, have capacities greater than 40 cubic meters, and have true vapor pressures less than or equal to 15 kiloPascals. Therefore, pursuant to 40 CFR 60.110b(b) and (c), these tanks are subject to the requirements of 40 CFR 60.116b(a) and (b).

To incorporate these requirements, Condition 2 shall be amended as follows:

~~2. That pursuant to 326 IAC 12 (40 CFR Part 60.110b - 60.117b, Subpart Kb), New Source Performance Standards (NSPS) for Storage Vessels for Petroleum Liquids,~~

~~(a) The dimensions of the storage tanks shall be kept in a readily accessible place, paragraph 116(b) for tank Nos. TK-208, TK-209, TK-210, TK-212, TK-214, TK-216, TK-219, TK-225, to TK-233, TK-235, TK-237, TK-243, TK-245, TK-247, and TK-248. Tank Nos. TK-201 and TK-203 store water and are not subject to the NSPS rule.~~

~~(b) Storage tank Nos. TK-210, TK-212, TK-226, and TK-228 shall require the reduction of VOC emissions by at 95%, paragraph 112(b)(a). Each tank will be equipped with vent condensers rated at greater than 95% control efficiency.~~

2. The owner or operator shall, for Tanks TK-203, TK-209, TK-216, TK-219, TK-229, TK-230, TK-231, TK-232, TK-233, TK-235, TK-237, TK-243, TK-245, TK-247, and TK-248, keep readily accessible records showing for each storage vessel:

(a) the respective dimensions, and
(b) an analysis showing the capacity of each storage vessel.

Said records shall be kept for the life of the source.

(h) Control Requirements:

Since Eli Lilly and Company has stated that they wish to control the emissions from the storage tanks with regenerative thermal oxidizers to comply with the overall control efficiency requirements of 40 CFR 63, Subpart GGG (95% overall), a new condition (Condition 3) shall be added requiring that all applicable tanks specified in this registration be controlled via regenerative thermal oxidation, that the thermal oxidizers shall be operated at all times the tanks are storing volatile organic compounds, and that the thermal oxidizers are operated at the parameters that achieve the desired overall control efficiency of 95%.

3. The owner or operator shall control the volatile organic compound (VOC) emissions from Tanks TK-253, TK-256, TK-258, TK-259, TK-260, TK-261, TK-262, TK-264, TK-268, TK-269, and TK-271, utilizing existing regenerative thermal oxidizers XXXX.

Said thermal oxidizers shall be operated at all times VOC emissions are being exhausted from the tanks, with the thermal oxidizers being operated at the parameters, established in the most recent compliance stack test(s), that achieve at a minimum, an overall control efficiency of 95%.

(i) Testing Requirements:

Since no tests of the existing thermal oxidizers have been conducted, a new condition (Condition 4) shall be added to establish the thermal oxidizer operating parameters that achieve the desired 95% overall control efficiency.

4. Within 90 days of issuance of amendment No. 165-14531-00009, the owner or operator shall perform volatile organic conpound (VOC) testing of thermal oxidizers XXXX to establish the operating parameters that achieve an overall control efficiency of 95%. Said testing shall be conducted utilizing methods approved by the Commissioner.

In addition, the Office of Air Quality (OAQ) shall be notified of the test date at least two (2) weeks prior to the date, a test protocol shall be submitted to the OAQ 35 days in advance of the test, and all test reports must be received by the OAQ within 45 days of completion of the testing.

5. Registration 165-2531-00009:

This permit was issued for the purposes of adding several tanks to module H of the solvent recovery operations. This registration requires the use of vent condensers on several of the tanks. However, the registration does not state the authority for requiring the vent condensers. Therefore the registration should be revised to clarify that the control device requirements of Subpart Kb do not apply and that vent condensers are not required.

The following is a description of the permit review conducted and the changes that will be made.

(a) 326 IAC 8-4-3 Applicability:

326 IAC 8-4-3 does not apply to any of the tanks because the worst case capacity of any of the tanks 146 m^3 (38,570 gallons) is less than the applicable level of 39,000 gallons.

(b) 326 IAC 8-5-3 Applicability:

The registration states that there are no storage tanks under this registration that have uncontrolled VOC emissions exceeding 15 pounds per day. Thus, 326 IAC 8-5-3 does not apply.

The Office of Air Quality is satisfied with this determination and will not incorporate any 326 IAC 8-5-3 requirements into the registration.

However, the statement in the registration is not necessary because it is not a requirement. Therefore, this paragraph will be removed.

~~Since none of the tanks have potential uncontrolled point source emissions of volatile organic compounds exceeding 15 pounds per day, the synthesized pharmaceutical manufacturing rule, 326 IAC 8-5-3, does not apply.~~

(c) 326 IAC 8-9:

326 IAC 8-9 does not apply to any of the tanks because the source is not located in any of the applicable counties (Clark, Floyd, Lake, and Porter).

(d) 326 IAC 8-1-6:

326 IAC 8-1-6 does not apply to any of the tanks because none of the tanks have uncontrolled potential emissions greater than or equal to the applicable level of 25 tons per year.

(e) 40 CFR 60, Subpart K:

40 CFR 60, Subpart K does not apply to any of the tanks because none of the tanks were constructed prior to May 19, 1978.

(f) 40 CFR 60, Subpart Ka:

40 CFR 60, Subpart Ka does not apply to any of the tanks because all of the tanks were constructed after applicable date of July 23, 1984.

(g) 40 CFR 60, Subpart Kb:

Eli Lilly has stated that the 40 CFR Kb requirements of the registration are incorrect. To determine the correct applicability a complete review has been conducted.

The following is a list of the results of the Subpart Kb applicability determination.

Tank	VOL ?	Capacity (m3)	TVP (kPa)	Const. Date	Mod. Date	Rule	Requirements
TK-249	N	-	-	-	-	-	None

TK-253	Y	74	<=15	04-01-91	-	Kb	Records of Cap. and Dimension
TK-256	Y	146	<=15	04-01-91	-	Kb	Records of Cap. and Dimension
TK-257	N	-	-	-	-	-	None
TK-258	Y	146	<=15	04-01-91	-	Kb	Records of Cap. and Dimension
TK-259	Y	74	<=15	04-01-91	-	Kb	Records of Cap. and Dimension
TK-260	Y	146	<=15	04-01-91	-	Kb	Records of Cap. and Dimension
TK-261	Y	74	<=15	04-01-91	-	Kb	Records of Cap. and Dimension
TK-262	Y	146	<=15	04-01-91	-	Kb	Records of Cap. and Dimension
TK-263	N	-	-	-	-	-	None
TK-264	Y	146	<=15	04-01-91	-	Kb	Records of Cap. and Dimension
TK-265	N	-	-	-	-	-	None
TK-266	N	-	-	-	-	-	None
TK-267	N	-	-	-	-	-	None
TK-268	Y	146	<=15	04-01-91	-	Kb	Records of Cap. and Dimension
TK-269	Y	74	<=15	04-01-91	-	Kb	Records of Cap. and Dimension
TK-270	N	-	-	-	-	-	None
TK-271	Y	74	<=15	04-01-91	-	Kb	Records of Cap. and Dimension
TK-272	N	-	-	-	-	-	None

Volatile organic liquids have never been stored in Tanks TK-249, TK-257, TK-263, TK-265, TK-266, TK-267, TK-270, and TK-272. Thus 40 CFR 60, Subpart Kb does not apply to these tanks.

Tanks TK-253, TK-256, TK-258, TK-259, TK-260, TK-261, TK-262, TK-264, TK-268, TK-269, and TK-271, each store volatile organic liquids, were constructed, reconstructed, or modified after July 23, 1984, have capacities greater than 40 cubic meters, and have true vapor pressures less than or equal to 15 kiloPascals. Therefore, pursuant to 40 CFR 60.110b(b) and (c), these tanks are subject to the requirements of 40 CFR 60.116b(a) and (b).

To incorporate these requirements, the registration requirements shall be amended as follows:

~~Records of storage capacity and physical dimensions shall be maintained for all nineteen (19) storage tanks, pursuant to 40 CFR 60.11b(b).~~

~~The three (3) waste recovery tanks, numbered 268, 270, and 272 shall be subject to initial physical tests of their vapor pressures. If a tank is determined to have a maximum vapor pressure between 15 to 27.6 kPa, then the vapor pressure shall be tested every six months and records shall be kept of the liquid being stored, the period of time the liquid was stored and the vapor pressure of the stored liquid, pursuant to 40 CFR 60.116b(f).~~

~~The three (3) tanks numbered 266, 270 and 272 shall be subject to the following requirements:~~

~~(a) An operating plan for the tanks and vent condensers shall be maintained pursuant to 40~~

~~CFR 60.115b(c).~~

~~(b) Records of startups, shutdowns and malfunctions shall be maintained pursuant to 40 CFR 60.7(b).~~

~~(c) The Office of Air Management Enforcement Section shall be notified of the anticipated startup date no earlier than 60 days and no later than 30 days prior to such date, pursuant to 40 CFR 60.7(a)(2) and 60.113b(c)(1). The operating plan shall be submitted with the notice.~~

1. The owner or operator shall, for Tanks TK-253, TK-256, TK-258, TK-259, TK-260, TK-261, TK-262, TK-264, TK-268, TK-269, and TK-271, keep readily accessible records showing for each storage vessel:

(a) the respective dimensions, and
(b) an analysis showing the capacity of each storage vessel.

Said records shall be kept for the life of the source.

(h) Control Requirements:

Since Eli Lilly and Company has stated that they wish to control the emissions from the storage tanks with regenerative thermal oxidizers to comply with the overall control efficiency requirements of 40 CFR 63, Subpart GGG (95% overall), a new condition (Condition 2) shall be added requiring that all applicable tanks specified in this registration be controlled via regenerative thermal oxidation, that the thermal oxidizers shall be operated at all times the tanks are storing volatile organic compounds, and that the thermal oxidizers are operated at the parameters that achieve the desired overall control efficiency of 95%.

2. The owner or operator shall control the volatile organic compound (VOC) emissions from Tanks TK-253, TK-256, TK-258, TK-259, TK-260, TK-261, TK-262, TK-264, TK-268, TK-269, and TK-271, utilizing existing regenerative thermal oxidizers XXXX.

Said thermal oxidizers shall be operated at all times VOC emissions are being exhausted from the tanks, with the thermal oxidizers being operated at the parameters, established in the most recent compliance stack test(s), that achieve at a minimum, an overall control efficiency of 95%.

(i) Testing Requirements:

Since no tests of the existing thermal oxidizers have been conducted, a new condition (Condition 3) shall be added to establish the thermal oxidizer operating parameters that achieve the desired 95% overall control efficiency.

3. Within 90 days of issuance of amendment No. 165-14531-00009, the owner or operator shall perform volatile organic conpound (VOC) testing of thermal oxidizers XXXX to establish the operating parameters that achieve an overall control efficiency of 95%. Said testing shall be conducted utilizing methods approved by the Commissioner.

In addition, the Office of Air Quality (OAQ) shall be notified of the test date at least two (2) weeks prior to the date, a test protocol shall be submitted to the OAQ 35 days in advance of the test, and all test reports must be received by the OAQ within 45 days of

completion of the testing.

(j) Vent Condenser Requirements:

Since there are no applicable rules that require vent condensers, the paragraph referencing them will be removed.

~~Emissions from the six (6) tanks numbered 257, 258, 266, 268, 270, and 272, shall be controlled by vent condensers utilizing Syltherm as the cooling media at a temperature of -65ºF.~~

includes permit requirements for several tanks of the solvent recovery tank modules. This permit requires that the VOC emissions from all of the process equipment be controlled by the existing regenerative thermal oxidizers while the storage tanks be controlled by vent condensers. To limit the VOC emissions from the modification to less than 40 tons per year.

Lilly proposes that the permit language be amended to state that the RTOs are an acceptable control device for the storage tanks.

Response 3:

4. <u>Proposed Changes to Registration Issued 10-11-90</u>:

This registration was issued to allow the replacement of several underground storage tanks with new above ground storage tanks in the solvent recovery operations. This registration requires vent condensers for some of the tanks as required by 326 IAC 8-5-3. Lilly states that 326 IAC 8-5-3(b)(1) des not apply to storage tanks and therefore requests that this requirement be removed from the registration.

In addition, Lilly states that the control requirements of some of the storage tanks (as required by 40 CFR 60, Subpart Kb) do not apply because the tank pressures are less than the applicable levels. Therefore, Lilly also requests that these requirements be removed.

Response 4:

5. <u>Proposed Changes to Registration 165-2031-00009</u>:

Registration 165-2031-00009 was issued to allow the replacement of several underground storage tanks with new above ground storage tanks in the solvent recovery operations. Lilly states that the control requirements of some of the storage tanks (as required by 40 CFR 60, Subpart Kb) do not apply because the tank pressures are less than the applicable levels. Therefore, Lilly requests that these requirements be removed.

Registration 165-2031-00009, issued on June 24, 1991, approved the replacement of 10

underground storage tanks located in building No. C64F with 15 above ground storage tanks and 9 underground storage tanks located in building C64G with 9 above ground storage tanks. There are two rules that applied to these tanks; 326 IAC 8-5-2, “Miscellaneous Operations: Synthesized Pharmaceutical Manufacturing Operations”, and 40 CFR 60, Subpart Kb, “Standards of Performance for Volatile Organic Liquids Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984". The following review checks the registration description and determines if 326 IAC 8-5-3 and/or 40 CFR 60, Subpart Kb, apply to the tanks permitted under the registration.

Registration Description:

Registration 165-2031-00009 approved the replacement of 10 underground storage tanks located in building No. C64F with 15 above ground storage tanks and 9 underground storage tanks located in building C64G with 9 above ground storage tanks.

According to the additional information submitted by Eli Lilly on November 30, 2001, this description is incorrect. The 15 above ground storage tanks were installed in building C64G, not building C64F, and the 9 above ground storage tanks were installed in building C64F, not building C64G.

Therefore, the registration tank description shall be amended as follows, by switching the building references:

“It has been determined that the following, to be located on SR 63N near Clinton, Indiana, is classified as registered: the replacement of 10 underground storage tanks in Bldg. No. C64~~F~~**G** with 15 above ground storage tanks and 9 underground storage tanks in Bldg. No. C64~~G~~**F** with 9 above ground storage tanks.”

40 CFR 60, Subpart Kb Applicability:

All the tanks under this registration are required to be controlled by refrigerated condensers. In addition, this registration has all tanks subject to 40 CFR 60, Subpart Kb, New Source Performance Standards for Storage Vessels for Petroleum Liquids. Eli Lilly has stated that this rule was incorrectly applied to some of the storage tanks under the registration.

To determine the applicability of 40 CFR 60, Subpart Kb to the tanks under the registration, the following information was submitted by Eli Lilly.

Bldg.	Tank ID	Control	Control ID	Material Stored	VOL Stored? (Y/N)	Capacity (M3)	TVP (kPa)	Date Installed
C64F	TK-201	Condenser	C64FHE201	Empty	N/A	74	N/A	12-01-91
C64F	TK-203	Condenser	C64FHE203	Empty	N/A	74	N/A	12-01-91
C64F	TK-208	Condenser	C64FHE208	MECL2	N	144	N/A	12-01-90
C64F	TK-209	Condenser	C64FHE209	MECL2W	Y	74	1.18	12-01-91
C64F	TK-210	Condenser	C64FHE210	Acetone	N	144	N/A	12-01-90
C64F	TK-212	Condenser	C64FHE212	Acetone	N	144	N/A	12-01-90
C64F	TK-214	Condenser	C64FHE214	Empty	N/A	144	N/A	12-01-90
C64F	TK-216	Condenser	C64FHE216	EtOAc	Y	144	10.16	12-01-90
C64F	TK-219	Condenser	C64FHE219	EtOAc	Y	74	8.60	12-01-91
C64G	TK-225	Condenser	C64GHE225	Empty	N/A	74	N/A	01-01-91
C64G	TK-226	Condenser	C64GHE226	Empty	N/A	146	N/A	01-01-91
C64G	TK-227	Condenser	C64GHE227	Empty	N/A	74	N/A	01-01-91
C64G	TK-228	Condenser	C64GHE228	Empty	N/A	146	N/A	01-01-91
C64G	TK-229	Condenser	C64GHE229	2B3OH	Y	74	6.67	01-01-91
C64G	TK-230	Condenser	C64GHE230	DMF	Y	146	0.64	01-01-91
C64G	TK-231	Condenser	C64GHE231	Empty	N/A	74	N/A	01-01-91
C64G	TK-232	Condenser	C64GHE232	EtOAc	Y	146	10.16	01-01-91
C64G	TK-233	Condenser	C64GHE233	ACN	Y	74	9.95	01-01-91
C64G	TK-235	Condenser	C64GHE235	Empty	N/A	74	N/A	01-01-91
C64G	TK-237	Condenser	C64GHE237	Empty	N/A	74	N/A	01-01-91
C64G	TK-243	Condenser	C64GHE243	Empty	N/A	74	N/A	01-01-91
C64G	TK-245	Condenser	C64GHE245	Empty	N/A	74	N/A	01-01-91
C64G	TK-247	Condenser	C64GHE247	Empty	N/A	74	N/A	01-01-91
C64G	TK-248	Condenser	C64GHE248	Empty	N/A	146	N/A	01-01-91

Tanks TK-201, TK-203, TK-214, TK-225, TK-226, TK-227, TK-228, TK-231, TK-235, TK-237, TK-243, TK-245, TK-247, and TK-248 are currently empty. Since there are no new parameters provided to establish true vapor pressures different than the pressures provided in the original application,

applicability to 40 CFR 60, Subpart Kb shall be determined using the information provided in the original application.

The following lists the criteria for determining applicability for Tanks TK-201, TK-203, TK-214, TK-225, TK-226, TK-227, TK-228, TK-231, TK-235, TK-237, TK-243, TK-245, and TK-247

Tank ID	Control	VOL Stored? (Y/N)	Capacity (M3)	TVP (kPa)	Date Installed
TK-201	Condenser	N (Water)	74	N/A	12-01-91
TK-203	Condenser	N (Water)	74	N/A	12-01-91
TK-214	Condenser	N (Acetone)	144	N/A	12-01-90
TK-225	Condenser	N (MECl2)	74	N/A	01-01-91
TK-226	Condenser	N (Acetone)	146	N/A	01-01-91
TK-227	Condenser	N (MECl2)	74	N/A	01-01-91
TK-228	Condenser	N (Acetone)	146	N/A	01-01-91
TK-231	Condenser	Y (Isobutanol)	74	1.53	01-01-91
TK-235	Condenser	Y (MAmAc)	74	0.11	01-01-91
TK-237	Condenser	Y (TriEthAm)	74	9.34	01-01-91
TK-243	Condenser	N (Acetone)	74	N/A	01-01-91
TK-245	Condenser	N (Acetone)	74	N/A	01-01-91
TK-247	Condenser	N (Acetone)	74	N/A	01-01-91
TK-248	Condenser	Y (Isopropanol)	146	5.88	01-01-91

Tanks TK-208, TK-210, and TK-212 do have materials stored in them, but none of these tanks contain materials that are volatile organic liquids as defined under 60.111(k).

Although Tanks TK-201, TK-203, TK-208, TK-210, TK-212, TK-214, TK-225, TK-226, TK-227, TK-228, TK-243, TK-245, and TK-247 were constructed after the 40 CFR 60, Subpart Kb applicable date of July 23, 1984, Subpart Kb does not apply to these tanks because the liquids stored in the tanks are not volatile organic liquids or have been de-classified as a volatile organic liquid.

The remaining empty tanks, TK-231, TK-235, TK-237, and TK-248, were permitted to store volatile organic liquids and were constructed after the applicable date of July 23, 1984. Tanks TK-231, TK-235, and TK-237, each, have a design capacity of 74 m3 with respective true vapor pressures of 1.53, 011, 9.34, and 5.88 kPa (as obtained from the original registration application). Based on these parameters and the Subpart Kb applicability levels, it is determined that the owner or operator shall keep records of the respective tank capacities and dimensions.

Tanks TK-209, TK-216, TK-219, TK-229, TK-230, TK-232, and TK-233, all store volatile organic liquids, were constructed after the Subpart Kb applicable date of July 23, 1984, and have true vapor pressures provided by the applicant. Therefore, applicability of 40 CFR 60, Subpart Kb shall be determined utilizing the updated true vapor pressures.

The following table lists the

Bldg.	Tank ID	Control	Control ID	Material Stored	VOL Stored? (Y/N)	Capacity (M3)	TVP (kPa)	Date Installed	Approval No.
C64F	TK-209	Condenser	C64FHE209	MECL2W	Y	74	1.18	12-01-91	
C64F	TK-216	Condenser	C64FHE216	EtOAc	Y	144	10.16	12-01-90	
C64F	TK-219	Condenser	C64FHE219	EtOAc	Y	74	8.60	12-01-91	
C64G	TK-229	Condenser	C64GHE229	2B3OH	Y	74	6.67	01-01-91	
C64G	TK-230	Condenser	C64GHE230	DMF	Y	146	0.64	01-01-91	
C64G	TK-232	Condenser	C64GHE232	EtOAc	Y	146	10.16	01-01-91	
C64G	TK-233	Condenser	C64GHE233	ACN	Y	74	9.95	01-01-91	

Tanks TK-209, TK-219, TK-229, and TK-233, each, have a design capacity of 74 m3. The respective true vapor pressures are 1.18, 8.60, 6.67, 9.95 kPa. Based on these parameters and the Subpart Kb applicability levels, it is determined that the owner or operator shall keep records of the respective tank capacities and dimensions.

Tanks TK-216, TK-230, and TK-232, have respective design capacities of 144, 146, and 146 m3. The respective true vapor pressures are 10.16, 0.64, and 10.16 kPa. Based on these parameters and the Subpart Kb applicability levels, it is determined that the owner or operator shall keep records of the respective tank capacities and dimensions.

326 IAC 8-5-3:

326 IAC 8-5-3 applies to any pharmaceutical facilities including reactors, distillation units, dryers, storage of volatile rganic compounds (VOC), transfer of VOCs, extraction equipment, filters, crystallizers, and centifuges that have a potential to emit of fifteen (15) pounds per day or more.

Only tanks TK-209, TK-216, TK-219, TK-229, TK-230, TK-231, TK-232, TK-233, TK-235, TK-237, and TK-248 all store volatile organic compounds. The respective emissions (as obtained from the original application) are 0.10, xxxx, 0.60

6. **<u>Proposed Changes to Registration 165-2531-00009</u>:**

Registration 165-2531-00009 was issued to allow the construction and operation of several tanks in module H of the solvent recovery operations. The registration required the use of vent condensers on several of the tanks. However, the registration did not state the authority for requiring the use of the condensers. Therefore, Lilly requests that these requirements be removed.

to existing FESOP 017-7088-03118, issued on July 10, 1997:

Central Paving, Inc. has submitted an application for a significant permit revision to remove a NSPS limitation that was incorrectly determined to be applicable to the source during the operating permit review.

In the original FESOP approval, 017-7088-03118, issued on July 10, 1997, the source was determined to be subject to the NSPS requirements under 40 CFR Part 60, Subpart I, Standards of Performance for Hot Mix Asphalt Facilities. Pursuant to 60.90, the facilities that are applicable to this subpart are any combination of hot mix asphalt facilities for which construction or modification commenced after June 11, 1973.

Central Paving is a hot mix asphalt operation, but the source commenced construction in 1968, prior to the applicable date of June 11, 1973. The source has modified its operation under SMF 017-9742-03118, issued July 17, 1998, but the modification was for the addition of a “cold” mix asphalt operation which is not a modification under Subpart I because Subpart I applies to hot mix modifications. Therefore, it is determined that Subpart I does not apply to this source and that the conditions in the FESOP referencing the NSPS requirements should and will be removed.

Enforcement Issues

There are no enforcement actions pending against this emission source.

Recommendation

The staff recommends to the Commissioner that the revision be approved as a significant permit revision. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application submitted by the applicant.
An application for the purposes of this review was received on December 27, 2000.

Emission Calculations

There will be no changes in emissions from the source due to the proposed changes. Thus, there are no emission calculations.

Potential To Emit

There will be no changes to the source PTE due to the proposed changes.

Actual Emissions

There will be no changes to the source actual emissions due to the proposed changes.

County Attainment Status

The county attainment status has not changed.

Federal Rule Applicability

In the original FESOP approval, 017-7088-03118, issued on July 10, 1997, the source was determined to be subject to the NSPS requirements under 40 CFR Part 60, Subpart I, Standards of Performance for Hot Mix Asphalt Facilities. Since the source was constructed in 1968, prior to the applicable date of June 11, 1973, and there were no modifications to the existing hot mix asphalt operation, it is determined that Subpart I does not apply and that the conditions in the FESOP referencing the NSPS requirements should and will be removed.

There are three requirements that are applicable in Subpart I; a particulate matter (PM) emission limit of 0.04 gr/dscf (60.92), a minimum opacity of 20% (60.92), and performance tests (60.93). To remove these requirements from the FESOP, changes to the following conditions will be made.

PM Emission of 0.04 gr/dscf:

Condition D.1.1 limits the PM emissions to the NSPS standard of 0.04 gr/dscf. This requirement and the NSPS references need to be removed. The condition shall therefore be changed as follows:

Emissions Limitations and Standards [326 IAC 2-8-4(1)] [326 IAC 6-3] ~~[326 IAC 12] [40 CFR Part 60.90]~~

D.1.1 Particulate Matter Emissions

PM: Pursuant to 326 IAC 6-3 (Process Operations) ~~and 326 IAC 12 (40 CFR Part 60.90, Subpart I)~~, the particulate matter emissions from the aggregate drying operation shall not exceed 8.2 pounds per hour ~~and 0.04 grain per dry standard cubic foot (gr/dscf)~~. This limit also satisfies the requirements of 326 IAC 2-2.

PM-10: Pursuant to 326 IAC 2-8-4, emission of particulate matter with diameter less than 10 microns (PM-10) from the aggregate mixing and drying operation shall not exceed 17.4 pounds per hour, including both filterable and condensible fractions. Compliance with this limit will satisfy 326 IAC 2-8-4. Therefore, the Part 70 rules (326 IAC 2-7) do not apply.

There are no other conditions in the permit that are associated with this limitation. Eliminating this PM limit will not change the PM emissions from the source because the outlet grain loading from the applicable cyclone is determined to be 0.035 gr/dscf which is less that the required 0.04 gr/dscf.

31.54 ton PM/yr * 1/8760 yr/hr * 1/60 hr/min * 1/24000 min/dscf * 2000 lb PM/ton PM * 7000 gr PM/lb PM = 0.035 gr/dscf

Minimum Opacity Requirement of 20%:

Condition C.2 limits the opacity to the standard 326 IAC 5-1 opacity percentages of forty percent (40%) opacity in twenty-four (24) consecutive readings and sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (60 readings) in a six (6) hour period. Thus, no changes need to be made to this condition. There are no other conditions in the permit that are associated with this requirement.

Performance Tests Following the Guidelines of 60.93:

The conditions of the permit that are affected by the testing requirements of 60.93 are Section C, Condition C.8, which simply needs the updated performance test language and Section D, Condition D.1.4, which has testing requirements that incorporate the NSPS requirements. Thus, the following changes shall be made:

Condition C.8:

Condition C.8 shall be updated to the most current standard language.

~~C.8 Performance Testing~~
C.8 Performance Testing [326 IAC 3-6]
~~Compliance testing shall be conducted on the venturi scrubber for the hot asphalt dryer and mixer within 36 months to 42 months of issuing FESOP, the Permittee shall perform the tests specified in this permit to demonstrate compliance with the applicable rule or permit condition. All testing shall be performed according to the provisions of 326 IAC 3-2.1 (Source Sampling Procedures) and by methods in the approved test protocol. The test protocol shall be submitted to:~~

~~Indiana Department of Environmental Management~~
~~Compliance Data Section, Office of Air Management~~
~~100 North Senate Avenue, P.O. Box 6015~~
~~Indianapolis, Indiana 46206-6015~~

~~at least thirty-five (35) days before the intended test date.[326 IAC 3-2.1-2(a)]~~

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Condition D.1.4:

Condition D.1.4 shall be changed to eliminate the NSPS references and limit while also updating the condition to the most recent standard language.

~~D.1.4 Particulate Matter~~

D.1.4 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

During the period between 36 and 42 months after issuance of this permit, **in order to demonstrate compliance with Condition D.1.1,** the Permittee shall perform PM and PM-10 testing utilizing methods ~~per 40 CFR Part 60 Appendix A, Method 5, 17, 40 CFR Part 51 Appendix M, Method 201, 201a, 202~~, as approved by the Commissioner. This test shall be repeated at least once every five **(5)** years from the date of this valid compliance demonstration. PM-10 includes filterable and condensible PM-10. **Testing shall be conducted in accordance with Section C- Performance Testing.**

State Rule Applicability - Entire Source

There will be no changes in entire source state rule applicability due to the proposed revision changes.

State Rule Applicability - Individual Facilities

There will be no changes in entire source state rule applicability due to the proposed revision changes.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as hazardous air pollutants on the Office of Air Quality (OAQ) Part 70 Application Form GSD-08.

There will be no changes in the HAP PTE due to the proposed revision changes. Thus, the HAP PTE will still be less than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments.

Conclusion

The operation of this source under the revisions proposed in this application shall be subject to the conditions of the attached revision, No 017-13667-03118.